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October 00
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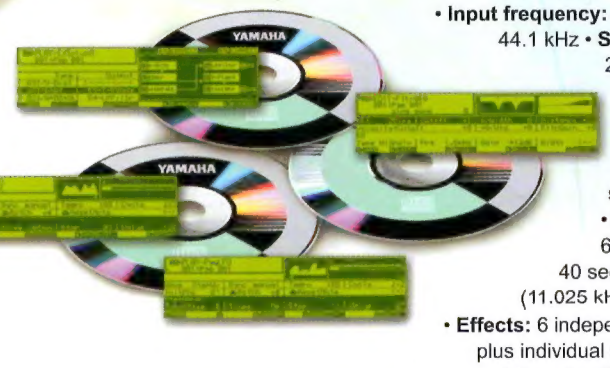

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Does not compute

After getting to grips with his computer woes, ambient technomeiser Toby Marks (a.k.a. Banco de Gaia) found time to record the latest sizzling Banco platter – *Igizeh* hits the shelves on September 25. More from: www.banco.co.uk

Once upon a time I used an Atari ST to make music. Actually, once upon a time before that I used an Alesis MMT8. And before that I used tape, but for this story that's not too relevant.

Around 1994, along with most of the rest of the world, I got rid of the Atari (running Creator) and switched to a newer, faster, super-duper Apple Macintosh – a 7100/66, with 66MHz 601 PowerPC processor, if you must know – running Logic Audio and Sound Tools. Oh, the power, the flexibility, and the week it took to get it working properly! But it was worth it as new sonic possibilities unfolded – until I wanted to upgrade to Pro Tools and needed a faster machine to run it.

So, in 1996, I got myself a top-of-the-range, lightning-fast Macintosh 9500/200 and Pro Tools 3. Oh, the power, the flexibility, and the two weeks it took... until earlier this year when, yes, you've guessed it, I wanted to upgrade.

Actually, this time I was just finding that the once God-like 9500 was struggling to cope with more than eight tracks of audio, and edits were taking a long weekend break to complete, so it was time to look at the new generation of much-talked-about 'supercomputer', the G4.

I went for a 400MHz model – more than fast enough for my current needs, and, remarkably, the least expensive of all the Macs I've bought, figuring that my current two-year-old, but totally useable, versions of Logic and Pro Tools would be blisteringly fast now.

Hmm. First of all, it turned out that my three-and-a-half-year-old Pro Tools cards had a chip that wouldn't work with G3/G4s, so they had to be updated. The older version of Logic wouldn't work with OS9, and also had to be updated; various bits of Pro Tools software wouldn't work with OS9 *or* a G4 and had to be updated, too. And, of course, I needed a new USB MIDI interface, as G4s don't have serial ports anymore – or I could have got a serial card to go in the modem slot and a new modem. The old ADB Logic dongle had to be replaced with a USB version, and I had to buy a USB PCI card so I could still run Logic on the 9500.

Thankfully, the latest version of Pro Tools no longer requires floppy disc authorisation (a few months earlier it would have done), otherwise I would have had to buy a USB floppy drive and download various bug fixes and utilities to allow the software to recognise it.

All in all, it turned out that buying a new Mac resulted in having to buy a new 'pretty-much-everything-else' to work with it, then spending several weeks trying to get it all to work – not something I had planned on, or been expecting. In fact, isn't that why we choose to work with Macs and not PCs in the first place?

Maybe I'm the only person who finds a system that works and then sticks with it for a few years while everyone else is upgrading every six months. If anyone else out there is thinking of upgrading a reliable old set-up – yes, I know people who still work happily and successfully with Ataris, Amigas and Tascam 38s – then I strongly suggest you find out just what you're letting yourself in for first!

Toby Marks

about THE MiX

THE MiX is the essential accessory for the recording studio. Our equipment reviews, written by working producers and engineers, give you an impartial opinion of the latest studio and recording gear, and our interviews get to the heart of the current techniques and issues in the recording industry.

THE MiX cover-mounted CD helps you produce better music, by providing a varied monthly selection of collectable studio-quality samples provided by some of the top pro's in the business, demos of the latest software and hardware, and audio tutorials demonstrating contemporary recording techniques.

contents

reviews

26 Line 6 Pod Pro
Everyone loved the original Pod – now it's spawned the eminently rackmountable and highly featured Pod Pro. *Tim Oliver* investigates

32 Langevin Dual Vocal Combo
Jon Musgrave checks out the latest from the Langevin stable – a high-quality, dual mic preamp

36 Rode NT3
The latest addition to the Rode NT pack of mics comes (down) under the close scrutiny of *Jim Warboy*

38 DUY EverPack
Another plug-in bundle from Spanish plugmeisters DUY, this time focusing on mastering/reverb. Come learn with *Seb Pecchia*

42 Focusrite MixMaster
Trevor Curwen masters his mixes with Focusrite's newest addition to the Platinum range

46 Roland VS-1880
The latest in a long and distinguished line of studios-in-a-box from Roland. *Sean Vincent* checks it out

51 DSound Stomp'N FX Vol.1
Lo-fi meets hi-fi with this collection of stomp-boxes in plug-in form. *Sean Vincent* asks 'Whatever next?'

54 Stirling Bundle
All you need for quality recordings on a PC – *Adam Fuest* checks out the SPL Gold Mike, Lexicon Core 2 and Marshall MXL2001-P

Record Labels Part II 76

Rode NT3 36

Stirling Bundle 54

Focusrite MixMaster 42

Langevin Dual Mic Combo 32

Net Profit 84

Line 6 Pod Pro **26**

Dubstar **62**

sound advice

84 Net Profit – Part I
Can the net really help your music career? MP3 guru *Russell Deeks* gets the low-down from musicians who have followed the online route to success

88 Adventures in Audio
Handy tips for beginners who are starting down the road of microphone placement and mic preamps

features

62 Dubstar
For their latest album, Dubstar abandoned the pro studio approach and returned to the bedroom. *Hamish Mackintosh* talks tech with producer and keyboardist Steve Hillier

68 James Hardway
The former drum 'n' bass guru has returned to the fray with an eclectic album recorded with live musicians around the world – on his laptop. By *Derek O'Sullivan*

72 Studio File
This month *Oz Owen* takes in the City of Bath, home to Moles residential studio

76 Starting a Record Label – Part II
How to get your newly-founded label's product out of the door and into the marketplace

regulars

8 News
The latest gear, the greatest talent and the hottest happenings in the world of music production

20 Open Mic
Got something to say? Join in one of our furious debates on the hottest recording topics of the day

58 Albums
Our verdicts on the biggest and best albums released this month, plus our new *Compilations* section

90 Subscribe to The Mix
Subscribe now to have your special limited edition issue delivered to your door every month

92 A&R Dept
Send in your demos and let our panel of industry experts deliver the verdict – if you dare

94 Help File
Problems in the studio? Tell our audio agony aunts all about it, and let them soothe your technical troubles

98 Readers' Ads
In the market for used gear? Check out our free ads for second-hand bargains galore

cd contents

software

track 1

PC and Mac

Emagic Logic Audio 4.5
Free upgrades to the latest version of Logic:
- Platinum 4.x to 4.5
- Gold 4.x to 4.5
- Silver 4.x to 4.5
- Micrologic AV 4.x to 4.5

Note: Please read the Instructions and ReadMe files on the CD before installing this software. Registered users in the UK with versions earlier than 4.0 need to contact Sound Technology on 01462 480000, since these upgrades are chargeable. Upgrade paths are available from all Logic versions and from Notator/Creator on Atari.

DSound Stomp'n FX Vol.1 p. 51
You'll find Chorus, Flanger, Auto Wah, Compressor, Noise Gate and EQ on these guitar pedal-styled demo plug-ins. The Graphic EQ is fully-working – and free!

PC only

DSound Simple Audio Plug-in Pack 1 p. 12
Demo version of these top-quality digital audio FX designed for DirectX and VST PC-compatible applications, containing three independent essential musical effects: Modulation FX, BPM Double Delay and Parametric EQ.

Digilogue Blue-Line Plug-in Pack p. 12
Shareware version of these clear and stylish new effects/processing plug-ins. Compressor, gate, EQ, reverb, chorus, flanger, phaser, delay, multi-tap and 'mono to stereo' – all at your fingertips.

Drumagog p. 12
A powerful Direct X drum replacement plug-in. This demo version of Drumagog is fully-functional, without the capability to record your own samples. It expires in 14 days.

RBC Voice Tweaker p. 12
A pitch transposer designed for monophonic signals such as voice or solo instruments. Before registering Voice Tweaker it will install in demo mode, which means that it will add a noise at -50 dB to the signal.

Mac only

DUY EverPack p. 38
A native bundle of five plug-ins: Z-Room (stereo reverb), DaD Valve (classic tube simulator), DUY Wide (spatial enhancer), DUY Shape (sound enhancer) and Max DUY (sound level maximiser) for MAS, RTAS, and AudioSuite.

demo of the month

track 2

Diss Funk 'Find my Way' p. 93
Blissfully mellow funk with an esoteric pop edge – clever and really rather fantastic. More from: dissfunk@hotmail.com

commercial track

track 3

Dubstar 'Rise to the Top' (Steve Hillier version) p. 62
Exclusive to *The Mix*, this hard-hitting track is Steve's homage to new-generation electro.

© Steve Hillier and Chris Wilkie ℗ EMI Records

gear demos

track 4

Line 6 Pod Pro p. 26
Amp models by the skipful – hark back to yesteryear with the sounds of the Vox AC30, 1959 Fender Bassman, Roland JC-120 and 1965 Marshall JTM-45, amongst others, all modelled by the Line 6 Pod Pro.

track 5

Langevin Dual Vocal Combo p. 32
The dulcet tones of our very own Jon Musgrave, admirably showcasing the features of Langevin's new mic pre. Hear the quality of the LDVC's limiting and EQ in action.

track 6

Focusrite MixMaster p. 42
Hear how Focusrite's latest addition to the Platinum range can beef up a dance track. First, by adding some compresssion and a little bottom end, then with the spatial enhancer to give a little width. Lastly, with varying EQ and compression settings.

track 7

DSound Stomp'n FX Plug-in Pack p. 51
Check out these plug-in stomp-boxes for Mac and PC. The full pack is demo'd here - chorus, EQ, flanger, noise gate, compression and auto wah, all put to work on drum loops, bass riffs, synth lines and vocals.

track 8

DUY EverPack p. 38
DUY's EverPack plug-in bundle gives you all the tools to add reverbs, valve warmth, stereo enhancement, *and* master your final mix.

Langevin Dual Vocal Combo **track 5**

Focusrite MixMaster **track 6**

samples

please read before using the samples on this CD!

All full tracks and demos, as well as samples marked * on the listing on these pages, are not licensed for commercial use. Samples that are not marked * may be used freely within any musical composition, if they are credited to *The Mix Sound Factory*.

tracks 9-24 (also available in WAV/AIFF format on track 1)

Steve's Analogue World

In need of an analogue fix? Then warm your tracks by the fire of Dubstar keyboardist and producer Steve Hillier with this selection of samples. All sounds are in multisample format (with the exception of 'The Angry Meal').

Roland Jupiter 6

track 9
Damp Patch – bass

track 10
Steve's Little Moron – chords

track 11
Moron's Child – chords

track 12
Keeping You Hard – bass

Korg MS20

track 13
Two Strong Men and You – drone

track 14
The Idiot of Sidcup – drone

track 15
My Filters Hate Me – drone

track 16
My Filters Hate You Too – drone

Nord Modular

track 17
Orpington Massive – sequence

track 18
Too Tight for Me – bass

track 19
Cynical Music Made Purely For Financial Gain – bass

track 20
Your Beautiful Dad – drone

Sequential Circuits Pro-One

track 21
His Male Awakes – drone

track 22
The Angry Meal – drone

track 23
Tiny Stain You Can't Explain – bass

track 24
You, in Nunhead – drone

sound factory

Netscape Online

Netscape Online: the free internet service in association with Future Publishing

track 1

Sign up for the new FREE Netscape Online Service, sponsored by Future Publishing and featuring content from Future Publishing's websites.

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- Comprehensive financial information
- Games for all your favourite formats, from Mac to Dreamcast

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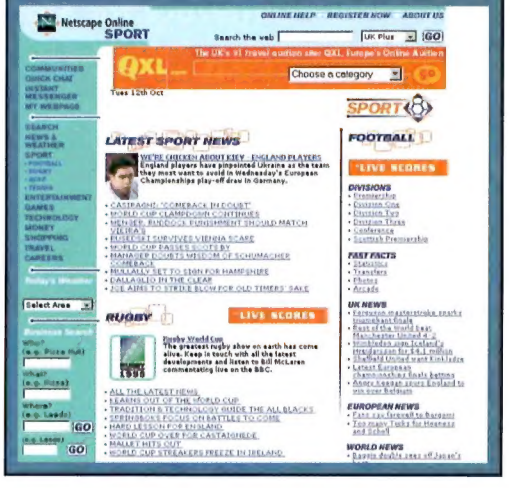


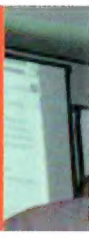
This month's guest samplist

Steve Hillier is keyboardist, co-producer and principal songwriter with Dubstar. Former DJ Steve got together with guitarist Chris Wilkie and vocalist Sarah Blackwood in Gateshead in the mid-'90s, applying his knowledge of beats to help create the familiar dub-pop of Dubstar. With a love of all things electronic, the band released their debut album *Disgraceful* in 1995 to much critical acclaim, which continued on the release of follow-up album *Goodbye*. Since then the band have managed to forge a distinctive sound and continue to court mainstream success while retaining credibility amongst fans and critics alike. Dubstar have consistently explored the use of computers and technology in the music-making process, combining it with a penchant for melody and acute pop sensibilities. Their new album *Make It Better*, which Steve co-produced with Mike 'Spike' Drake, is out now on Food Records.

news

what's new in music production

On the net p.10
Mike Collins reports on the latest online recording options, Rocket Network-style



It's magic!

Emagic launch high spec, low-cost USB interface for Mac and PC

The MT4 sports no fewer than two independent MIDI inputs and four outputs – that's 32 in and 64 MIDI out channels

As well as releasing a major upgrade to their Logic sequencing package, Emagic have been developing some hardware as well. The new MT4 is a MIDI interface for USB-equipped computers, offering two independent inputs and four independent outputs, providing 32 in and 64 out MIDI channels. The MT4 receives power directly from the USB port and each I/O conveniently has its own activity LED.

Directly supported on the Mac by Logic 4.01 and SoundDiver 2.07 upwards, the MT4 can also be used with OMS-compatible software with the supplied drivers. For Windows 98, an MME-compatible USB driver is provided.

We'll be looking at the MT4 and Logic's upgrade to version 4.5 next month, and, to save you downloading the upgrade from Emagic's website, we've included the upgrades to 4.5 on the covermount CD – covering MicroLogic, Silver, Gold and Platinum for both Mac and PC.

Price: MT4 £129; upgrade 4.x to 4.5 free
More from: Sound Technology
Tel: 01462 480 000 **Web:** www.soundtech.co.uk

Hands-on FX

Roland have expanded their 'hands-on' philosophy to include effects, with the introduction of the EF-303, a standalone effects processor designed with performance in mind – evidenced by the GrooveBox-style knobs on the control surface. There's also an intriguing-looking 16-part step modulator – with memories – allowing complex motion effect sequences that allegedly aren't possible using conventional methods, such as knob-tweaking. An onboard monophonic synthesizer, controlled via the step modulator, makes it possible to write your own basslines. Those FX types include filters, isolator, flangers, delay and pan, reverb and gate, slicer and pan, compressor, lo-fi processor, ring modulator and filter, phaser, voice, voice modulator, synth and delay, synth bass and distortion, synth rhythm and reverb. Sounds groovy.

Price: £469
More from: Roland UK
Tel: 01792 702 701 **Web:** www.roland.co.uk

Knobular effects – and more – courtesy of those clever bods at Roland

Sample CDs p.11
Our verdicts on the latest and greatest releases in the world of sample CDs

The Damage Manual p.17
Producer Martin Atkins on the industrial supergroup's debut

Meek landing

Another Meekrophone is amongst us – the TB-47 tube condenser vocal and instrument mic. It offers a high-gain valve preamp section and the dual-capsule from previous models in the range. Multiple patterns are provided, with stepped variation from omni to cardioid to figure-8.

Price: £1,644
More from: JoeMeek
Tel: 01803 321921
Web: www.joemeek-uk.com

The TB-47 condenser mic, with multiple polar patterns

Plasa giveaway

The Professional Light and Sound Association (PLASA) is gearing up for its 2000 show at Earl's Court. Set to run from 10 to 13 September, PLASA promotes the entertainment technology industry around the world – but, far more importantly, they've given us 20 tickets to give away!

All you have to do to claim a pair of tickets for the PLASA show is email us. The first 10 emails we receive will be eligible for free entry to this unmissable event!

Send your emails – *only* on the 5 September – to themix@futurenet.co.uk with subject 'PLASA show', your address and telephone number, and we'll let you know if you're off to PLASA.

Mercury rising

TC Works get ready to blast off with Mercury-1 soft synth for VST

TC Works will soon be showing off a new VST instrument for Mac and PC. The Mercury-1 is a monophonic synth with four engines, each featuring dual oscillators and additional sub oscillator. According to TC, the Mercury-1 is ideal for convincing leads, fat basses and classic synth effects. A bit of an all-rounder, then.

Crammed with all the usual waveforms, there's also oscillator sync, ring modulation, 24dB/octave low-pass filter, two envelope generators, MIDI-assignable modulation and a MIDI-sync'able LFO onboard. And there's still enough room left to squeeze in TC's proprietary SoftSat™ drive for adding a little analogue-style distortion. Naturally, we'll be checking it out very soon.

Price: £99
More from: Arbiter
Tel: 020 8970 1909
Web: www.arbitergroup.com

If you cut your analogue teeth on the likes of Roland's SH-101, then navigating the Mercury-1 should be simplicity itself

On the net

A global community of musicians and producers making music via the internet – Rocket Network have been championing this ideal for years. Mike Collins reports on their latest technology

I recently attended a lively MPG event at Media Tools, featuring a live demo of the latest Rocket Network technology. The basic idea is this: Rocket (formerly known as ResRocket) provide software technology to their partners, which is incorporated in popular digital audio workstation software. The software allows low-quality versions of the audio being recorded to be posted via the internet to anyone who is using Rocket-powered equipment, so they can work on the same song together.

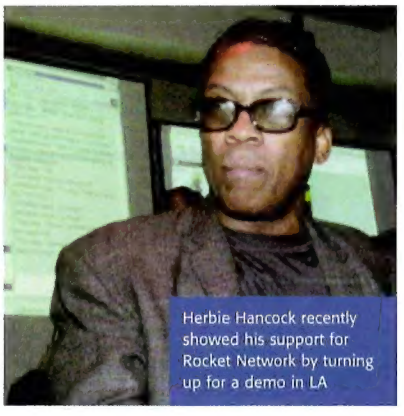
Rocket provide a central server – with lots of hard disk space – over in the USA, to which high-quality versions of the audio are eventually posted once the producer of the session is happy with the parts recorded. The low-quality files are adequate to let you hear the musical phrasing and choice of notes, so you can decide whether to keep or scrap the part, although you would not normally use these in a final mix. The advantage here is that low-quality files travel much faster over the net than high-quality ones, making it practical to use these while developing the recording – even with a 56k modem (although ISDN or a faster connection is more desirable). For those with slow modems, a more practical proposition is to send the high-quality audio files across on CD-R or DAT. Nevertheless, with higher-speed connections such as ADSL, sending the final audio files across the net becomes a much more practical proposition.

Rocket make their money by providing the network and the server on which you lease space on an annual basis, so you are paying to store your audio projects and for server throughput – the amount of audio you push up to, and the musicians in your 'virtual studio' pull down from, the server. Space on the server is sold through resellers like Harmony Central, in the case of Emagic, or directly from a Rocket partner, as is the case with Steinberg. A basic try-out service for Cubase users costs $100 (US) a year, for which you get 25Mb of space on the server and around 150Mb of throughput – enough space to put one compressed song on the server. If you want more than that, you pay Rocket incrementally for the amount of storage and throughput you use. One person 'owns' the studio and each participant pays a one-off fee of $30 to download the pro version of Rocket.

This doesn't sound too expensive, until you consider that a project using 32 tracks of CD-quality audio would require maybe 1Gb of space to store at full quality. Currently, no-one is using more than 300Mb on the Rocket server, so is it mainly hobbyists rather than professionals using the system at present?

Speaking from the audience, producer Steve Lipson asked plenty of probing questions about the viability of handling communications using a 'chat window' over the internet, rather than face-to-face, as would be possible in a real studio, and about compatibility issues when using TDM plug-ins as opposed to native Logic plug-ins.

Rocket founder Willy Henshall responded that they are looking into using voice and video communications over the net, but admitted that for professional work they are falling back on the plain old telephone system. Currently, the Rocket-powered version of Logic doesn't work with TDM plug-ins, although a version is on its way that will. However, Digidesign are developing Pro Tools for Rocket, and have even bought 20% of the company – a firm endorsement of the concept.



Herbie Hancock recently showed his support for Rocket Network by turning up for a demo in LA

Producer Pip Williams had reservations, too, stating, "Some producers may judge their product solely on whether the right notes are being played, but I, and most of my colleagues, like to experiment with different EQs as we record parts, so I felt the whole procedure was a compromise. It seemed that the demo was mostly about the novelty value of people in different locations putting a piece of music together. I was also worried about the whole communication thing. I happen to be of the old school that believes music comes from the feelings of a group of people interacting – eye contact, totally spontaneous reactions to what the others are playing, and so on."

Despite these comments, Williams said he fully intends to explore the system himself: "I totally accept that it could be very exciting to make music with other people around the globe, using the net. Young music-makers in their bedrooms will be very turned on by this prospect. However, the aspect from which Rocket could be most effective was hardly touched on – the possibility of adding one or two crucial overdubs to a near-finished track. If I wanted to add a keyboard part by Bill Payne of Little Feat, then Rocket would definitely be a powerful tool – not as ideal as Bill being there in person, but certainly cheaper!"

Willy Henshall explained that two software packages are currently Rocket-powered: Cubase VST 5.0 and Logic Platinum 4.5. However, Digidesign will be releasing their new version of Pro Tools at the next AES show and, amazingly, Euphonix are now developing a Rocket-powered system to allow access to their high-end equipment using the Rocket server. Rocket are also talking to all the other major software and hardware manufacturers and expect that by NAMM this year all the major sequencers will be Rocket-powered – and by NAMM next year they predict that 95% of all audio equipment will involve Rocket somewhere. Ambitious targets!

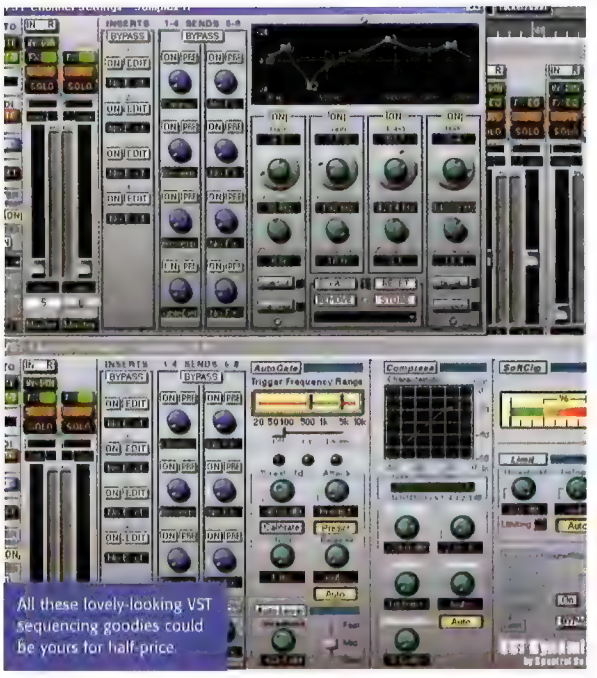
Cross-application and cross-platform capabilities are limited at present – Cubase won't talk to Logic, for example – and this ideal may never be realised in the future either. Producer Robin Millar commented on this at the demo, saying, "They do not mention important devices like the E-mu SP1200 or the Akai MPC60/3000 – but consider that 60% of US sales last year were hip hop and 80% of those music-makers use either SP1200 or MPC, or combinations of these." Still, like Pip Williams, Millar had to acknowledge that the system has very powerful potential.

After the event, Millar had the last word, declaring, "The Rocket system will undoubtedly be incredibly useful for artists and producers who want a particular musician or a specific remix engineer to work on their track".

• *Mike Collins*

Rocket Network: www.rocketnetwork.com

We'll bring you more on Rocket Network next month in Part II of our Net Music feature. This month's installment starts on page 76



All these lovely-looking VST sequencing goodies could be yours for half-price.

Half-price Cubase!

Millennium Music have announced a Cubase 5 'Open Day', where they will be offering half-price upgrades to Cubase 5 (standard version) to existing Cubase users able to provide proof of ownership of any version – ideally a purchase receipt. The same applies to users of competing packages, who will qualify for a competitive upgrade to Cubase 5 for the same price of £185 (including a £20 registration charge). This never-to-be-repeated offer takes place on 4 September between noon and 9.30pm at the Millennium stores in Nottingham and their new store in Finchley.

This also marks the start of the Cubase Roadshow. Yes indeed, Steinberg and Arbiter have organised a demonstration tour taking in cities the length and breadth of the UK to showcase the recently-overhauled sequencing package. Aiming to give a head-start with Cubase 5, experts will be on hand to offer advice and questions during the two-hour presentations.

Cubase Roadshow
More from: Arbiter
Tel: 020 8970 1909 Web: www.arbitergroup.com

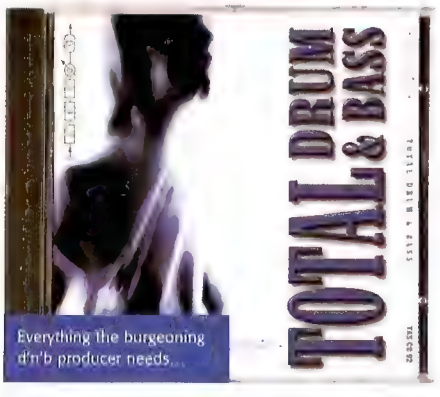
Cubase Open Day
More from: Millennium Music
Tel: 020 8349 2090 Web: www.millennium-music.co.uk

Sample CDs

The cream of the latest sample CD crop, rounded up and reviewed by Michael Stand

Total Drum & Bass

No less than three shiny discs grace this little gem. Ya gets one for the loops, one for instruments and vocals, and, as a friendly touch, one more with the whole lot in WAV format. Usability is obviously high on the agenda for this offering, and it shows in the layout and vast array of timbres and general variety of stuff available here. From manic fast Latino-tinged loops to Roni Size-esque loops, there is a spectrum of – albeit esoteric, at times– d'n'b to keep the purist and the pioneer equally trigger-happy. The instrument and vocal section sways between lush acoustic bass lines, some freaky subs, and odd pads, guitars and synths. And then you get a load of very usable vocals; everything from Indian vocoded weird stuff to standard 'ooohhhs' and one-word snippets. The glory of the whole collection is how easily the parts can fit together in numerous ways. Hell, it may just be all the up-and-coming d'n'b producer might need.



Everything the burgeoning d'n'b producer needs...

Xperts Of Techno

The sleeve notes of this CD suggest that we realise the difference between techno from the likes of Derrick May and Juan Atkins before lumping it in with Eurotrash beats. In fact, they're veering towards being a tad anal about it all. But, hey, you didn't come here to read about sleeve notes – listening and sampling is much more fun. And with the inspired quality of these tracks, you ain't gonna go far wrong. Neatly separated into 10 demos with composite parts, followed by dedicated drum loop tracks and what are termed 'Music Loops', there's a huge variety of material here. It's not all your standard stuff either, although that's there if you want it; there are some really imaginative ideas at work throughout the CD that ain't simply confined to techno. Splendid hi-hat patterns and a nod to Mr Oizo grace the CD and its Xpert ethos.

Bill Laswell's Sound Virus – Dub Tactic Manual

If you're not familiar with the name Bill Laswell then you either live under a rock or have no recognition of the word 'dub', so stop reading now! For everyone else, you just need to check out the demo track of this superb CD to be convinced. Funky, ethnic, and most decidedly dub, this is probably the ultimate collection of super deep basslines, deliriously delayed snares and general Jamaican cool. Organised neatly by tempo and key, and with an abundance of composite parts, *Dub Tactic Manual* is an absolute breeze to use. And it doesn't even have to be confined to dub productions; many of the drum sounds could fit into numerous genres, and some of the basses would sit perfectly in drum'n'bass tracks – something for everyone. But if you're into dub, it's likely to be indispensable.

If dub is your thang, you won't go far wrong here

Prices: *Total Drum & Bass, Xperts Of Techno* and *Bill Laswell's Sound Virus – Dub Tactic Manual*: £59.95 each
More from: Time + Space
Tel: 01837 55200
Web: www.timespace.com

Plug-in corner

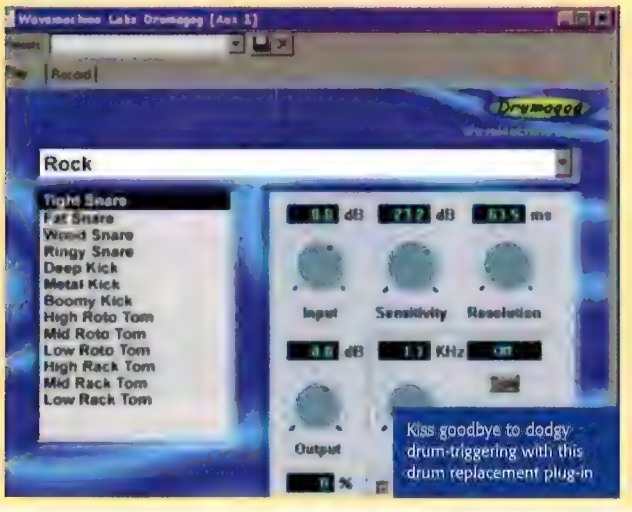
Sean Vincent's round-up of the hottest plug-ins in town

Drumagog — PC $79(Standard) £149(Pro)

Now this one really *is* weird. Drumagog is a DirectX drum replacement plug-in. I'm sure most of us have been in the predicament where we have a great performance down on tape, but the drums (even if well-played) sound pants. Well, in the 'old days', you had to set up a sampler with an audio trigger to replace dodgy snares or kicks. But now there's plug-in technology to help. Simply insert the Drumagog onto the offending channel and adjust the sensitivity until it's firing in all the right places. Nice. It comes with a CD-ROM of pre-recorded drum samples, but you are free to use any WAV file you like. It's worth remembering that this will work on most audio sources, not just drums – there's plenty of scope for playing about.

An interesting feature is stealth mode. If you need to replace the snare in a track, but the snare shares a track with the hi-hat, stealth mode lets the hi-hat pass through without triggering the new snare sample. With 256-note polyphony, even full-on press rolls can be re-triggered faithfully. The Pro version allows you to record your own samples, but either version allows WAV file playback. Check out the demo of the standard version on the CD.

More from: www.drumagog.com



DSound Simple Plug-in Pack — Mac & PC £199

On page 51 of this issue, you'll find a review of DSound's Stomp'n FX Vol.1 plug-in pack. Well, this is another pack from the same guys, called simply, the Simple Plug-in Pack. It's a lovely collection of three very cool-looking plug-ins: Modulation FX, BPM Double Delay and Parametric EQ.

Modulation FX covers everything from chorus and flanging to phasing and vibrato. BPM Double Delay is a wicked little beat-matched delay line, with two delays and full programmability, and a graph showing exactly where the delays will fall. Parametric EQ is a standard EQ, but the controls are nice and clear, and the graphic front end shows you exactly what you are doing. Including five different filter types, the EQ also allows filter grouping for simultaneous control. If only all plug-ins looked and sounded this cool – try out the demos on the cover CD.

More from: www.digital-media.co.uk or www.dsound1.com

Digilogue Blue Line — PC $35 (US)

German company Digilogue have been working on their Blue Line set of shareware plug-ins for nearly two years now. They comprise all the effects and processors that you're likely to need, including compressor, gate, EQ, reverb, chorus, flanger, phaser, delay, multi-tap, filter and 'mono-to-stereo'. They all use a similar graphic front end, which is both clear and stylish. Trying these out on a number of different tracks, the results were quite impressive. They sound good and eat up relatively little processor power. Available in VST 2.0 or DirectX formats for PC only, the Blue Line collection costs only the price of registration, which gives you access to support and future updates for free. Try out the demo on this month's cover CD.

More from: www.digilogue.de

RBC Voice Tweaker — PC $59 (US)

Finally this month, let's take a look at a really useful DirectX plug-in that's been around for a while now, but still remains undiscovered by many. The RBC Voice Tweaker is based on a similar idea to Antares' Auto-Tune, but adds functions such as MIDI control and independent control of pitch and harmonics. When used with monophonic sources like vocals or solo instruments, you can alter the pitch by up to ±2 octaves. Using the MIDI control, you can effectively 'play' a new melody for your pre-recorded vocal. This one has been pressed into use a fair bit for compiling backing vocal harmonies and it really works well, especially if you like to get a really processed sound – very in-vogue at the moment. It's a tad grainy for main vocal pitch correction, but, again, this depends on what sound you're after. The demo is on the CD.

More from: www.rbcaudio.com

DSound Stomp'n FX Vol.2 — Mac & PC £TBC

Stop press! Those busy dudes at DSound must be up all night making plug-ins – their new Stomp'n FX Vol.2 is almost ready for release. Based on the same idea as Vol.1 (reviewed on page 51), Vol.2 features more pedals, including reverb, BPM delay, overdrive, auto-pan, phaser and tremolo. The question is, can we have too many pedals in our set-ups? Er… nope!

More from: www.dsound1.com

NB: Fxpansion have just released the V1.1 update for their Series 1 plug-ins. Free to existing users, you can get it from: www.fxpansion.com/upd11/fx_series1_11.zip

EOS
emulator operating system 3
software feature
beat munging
Beat-Munging is a new real-time DSP tool that analyzes your drum loops and phrases, automatically determines the tempo, and then perfectly loops the sample for ultimate groove preservation. Beat-Munging also allows you to change your loop's time signature (i.e. from 4/4 to 7/8), tempo, swing factor and individually manipulate beats within your loop, all in real time. Beat-Munging gives you unprecedented rhythmic control over your audio and may radically change the way you create and manipulate loops and grooves - and you will only find this breakthrough technology in E-MU Ultra Samplers.
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The hard line

Your monthly guide to what's new in PC and Mac land

Good job, Steve

MAC

The dust has finally settled over what was something of a bonanza Macworld Expo. Apple chief Steve Jobs announced a number of hardware revisions – and one addition – to Apple's so-called 'Product Matrix'. As always, the rumours, some of which we touched on last issue, were perhaps closer to the mark than Jobs would have liked. Apple toughened their stance on speculation about new products in the run-up to the New York Expo, actually going to the lengths of having one or two speculating websites closed down. Now, with the new products unveiled, we get a clear indication of where Apple is headed, so read on...

Apple CEO Steve Jobs has every right to smile after the New York Expo

Designer devices

MAC

Apple's new optical mouse is Y2K all the way

Apple's pebble-shaped mouse: the worst mouse in the world? Then how about an optical tracking, designer-sculpted, button-less mouse? Sleek, attractive and extremely precise is the verdict on Apple's new mouse from industry pundits and users alike. The cut-down keyboard got a redesign, too, with the return of a full set of function and cursor keys, a media eject key and – long overdue – a forward delete key. The styling remains much the same, but the increased elbowroom should make for fewer typos.

Take two

MAC

Arguably to keep pace with the MegaHertz ratings being bandied about in the Wintel world, Apple have decided to stick *two* processors in their middle (450MHz) and top-end (500MHz) G4 models, while keeping the price static. The decision to go multi-processor will bring maximum benefit only when Mac OS X arrives, although applications such as Photoshop are already geared up to make full use of this extra muscle. The new G4s also come with one gigabit ethernet networking capabilities, sufficient to stream high-quality, uncompressed video directly from one Mac to another. The 450MHz G4 retails for £1,749 plus VAT. A good deal, then.

Two processors are better than one for the speedy G4

Delta force

MAC & PC

M Audio have a new addition to their Delta range, an entry level 24-bit/96kHz PCI card. The Delta Audiophile 2496 (£169) has S/PDIF and MIDI I/O onboard as well as stereo analogue ins and outs on RCA jacks, coupled to 24-bit/96kHz converters capable of 110dB dynamic range. But why use it solely for music? The WaveWorks also supports a variety of Dolby formats *and* DVD audio, and offers control over SCMS (Serial Copy Management System).

More from: **Midiman**
Tel: **01423 886 692** **Web:** **www.midiman.com**

Licensed to drive

PC

Anyone with Midiman products may be interested to know that their 1x1, 2x2, 4x4 now have Windows 2000 drivers. There are also Windows 2000 and NT drivers for the BiPort 2x4s. And finally, Windows 2000, ASIO 2 and EASI drivers for the DiO 2448 digital mastering card. All these drivers are available as free downloads.

More from: **www.midiman.com**

Soundcard for a song

PC

VideoLogic have released the SonicFury DSP-based card. Costing just £79, it features six discrete output channels for Dolby Digital, a MIDI engine with an 8Mb sample set, 64 hardware voices and up to 1,024 software voices.

SonicFury is compatible with the PC99 specification and comes bundled with an extensive range of software, including Making Waves and Sonic Foundry's Acid XPress.

Price: **£79**
More from: **VideoLogic**
Tel: **01923 277477**
Web: **www.videologic.com**

SonicFury – a whole lotta DSP for your lolly

iMake-over

MAC

Apple's iMac range has got a Y2K wash and brush-up. Steve Jobs announced a new set of colours – Indigo, Ruby, Sage and Snow – as well as additions to the top-end model, the iMac DV Special Edition (available in Graphite or Snow only). This boasts a 500MHz G3 processor, 128Mb RAM and a 30Gb hard disk. The basic 350MHz iMac will retail for around £550, plus VAT, when it becomes available in September, while the top-end model will set you back around £1,300.

Small is beautiful

MAC

Apple's Product Matrix has grown, in the form of another design classic: the G4 Cube. Measuring a mere 9.8" x 7.4" x 7.7", but still packing what is essentially the same technology as that found in the low-end G4, the Cube is a space-saving, compact design that simply withdraws from its transparent casing for upgrade purposes. The Cube – like the iMac – has no cooling fan, making it virtually noiseless in operation. A mere three cables are required to connect to the monitor, internet and keyboard, meaning fewer tangles around your desk, while 20W Harman Kardon speakers bring your audio to life. The low-end Cube will set you back £1,249, plus VAT.

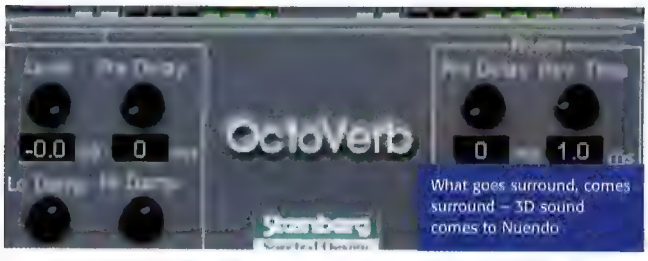
'Cubist art' comes to life in Apple's new G4 cube

Nuendo goes Surround

PC

The future of music is surround – there's little doubt of it. But how do you go about creating a convincing 3D soundstage when practically all current equipment is designed to work with 2-channel stereo signals? As those of you who read the review of Nuendo in *The Mix* issue 76 will know, Steinberg's latest baby has surround sound ability built into its very heart – and now they have released a set of effects plug-ins specifically for dealing with multi-channel surround sound. Each plug-in can handle up to eight channels, and the pack consists of: Octocomp, a single band compressor; Octomaxx, a multiband compressor; OctoQ, a 7-band parametric EQ; and Octoverb, a true 3D reverb generator. The last two plug-ins are LFE Combiner and LFE splitter, used for either integrating or separating a subwoofer channel, respectively. *(AC)*

More from: **Arbiter**
Tel: **020 8970 1909** **Web:** **www.arbitergroup.com**



What goes surround, comes surround – 3D sound comes to Nuendo

Who's the fairest of them all? The Snow white iMac.

For further information telephone (020) 8442 3055

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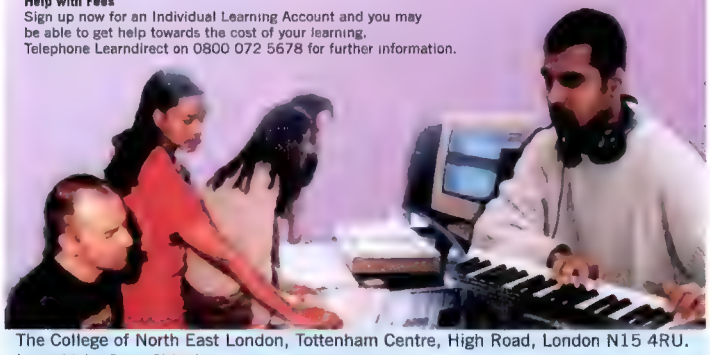
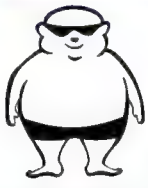


The College of North East London, Tottenham Centre, High Road, London N15 4RU.
(nearest tube: Seven Sisters)

TL Audio

fatman



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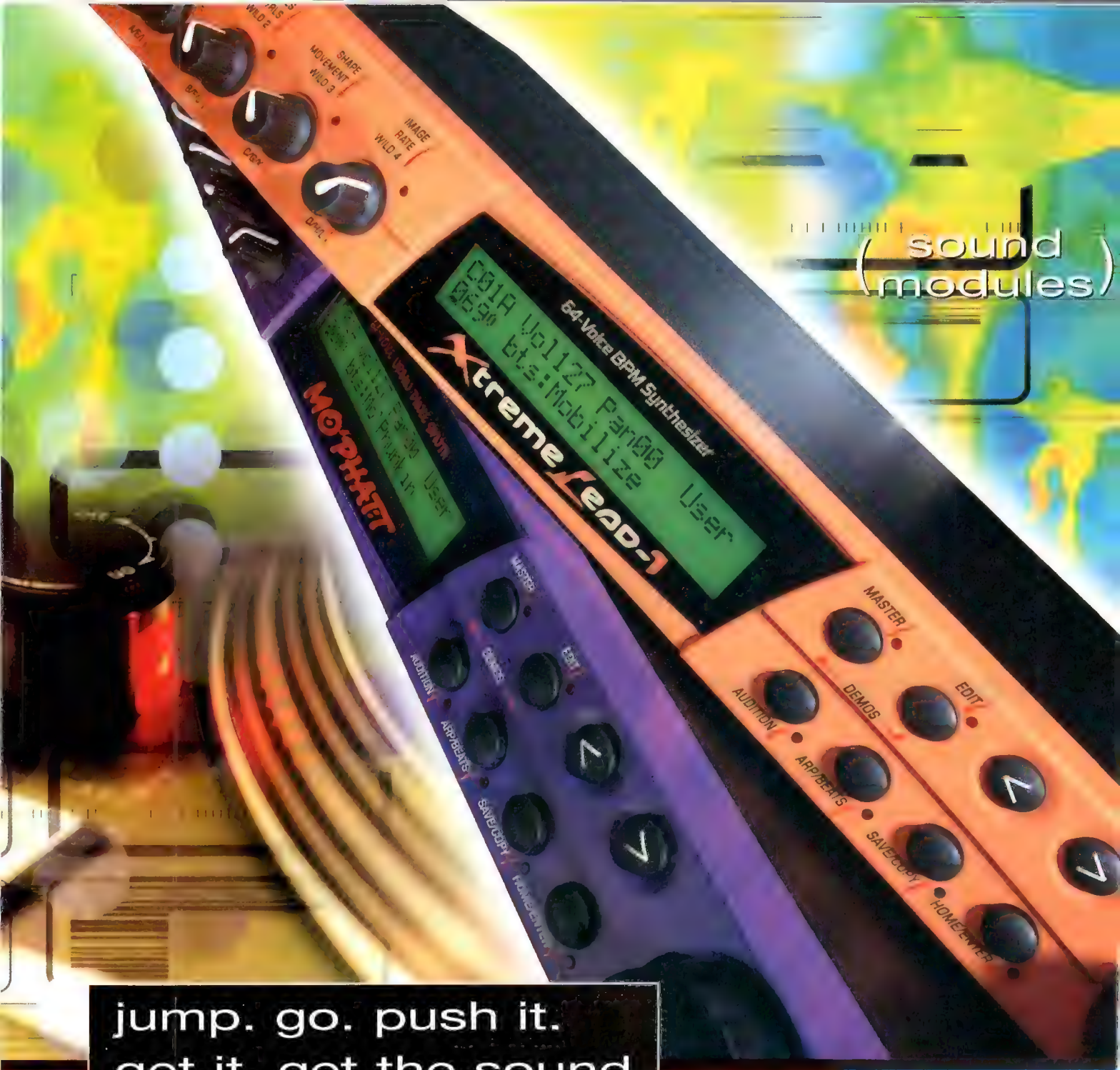
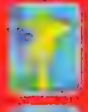


jump. go. push it.
get it, get the sound
get some of this.



If you want modules which offer pumpin audio quality, are stuffed full of fresh, dance-oriented sounds and enough facilities to satisfy your hedonistic urges, the new E-MU Mo'Phatt™ and Xtreme Lead-1 dance modules are the ultimate adrenaline rush. 32MB of killer sounds. Unparalleled rhythmic possibilities. Up to 16 syncable 32 step sequences or arpeggiators and a SuperBEATs mode which allows you to effortlessly trigger, latch and unlatch synced drum loops, percussion grooves, basslines, synth sequences and lead lines from separate keys on your keyboard.
You have got to get some of this.

Xtreme Lead-1
- 64 voice BPM Synthesizer
- SuperBEATs triggering mode
- Incredibly diverse dance soundset
- 16 syncable arpeggiators

Mo'Phatt
- 64 voice Urban Dance Synth
- 32MB of fresh new urban dance sounds
- 16 syncable arpeggiators
- SuperBEATs triggering mode

the proteus family

Mo'Phatt

Xtreme Lead-1

B-3

Virtuoso 2000

Proteus 2000

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Track notes

The Damage Manual

The aggressive debut album from this industrial supergroup was recorded at five different studios around the globe

Producer Martin Atkins is a firm believer in the 'horses for courses' school of recording. Having already worked with everyone from Nine Inch Nails to the Sweet, after spending years swallowing the bittersweet 'pil' of being in Public Image Limited alongside John Lydon and bass ace Jah Wobble, Atkins is a respected recordist in his own right, as well as being a serious drummer, percussionist and programmer. He also has, thanks to the growing strength of his Invisible records label, his own Waiting Room studio near the Midlands home where he is based for most of the year.

But when it came to laying down the eponymous debut album for the industrial supergroup known as The Damage Manual – which is, essentially, Atkins and Wobble, ex-Killing Joke guitarist Geordie Walker and Pigface vocalist Chris Connelly – Atkins and chief engineer Jason McNinch opted to use several other studios around the globe. Indeed, recording this opus was to stretch to around one-and-a-half years. The original sessions for the seven tracks were held in Berwick Street studios in Soho, London – with engineer James Collins and assistant Nick Caffrey – partly because "I'd worked on the *Betrayal* album in the same street with Wobble some 20 years before and it felt right to return there as we'd both always felt we had unfinished business there, musically speaking. It was just gonna be me and him, but then Geordie Walker called and the whole Damage Manual thing just mushroomed. Berwick Street's not a huge place, but you get a fairly good sound there and that's where the basic tracking was done."

"Sometimes we cut out thousands of pounds worth of recording..." **Martin Atkins**

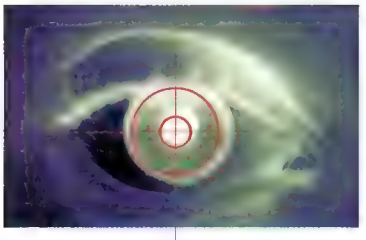
Vocals and 'scratching' were added at ASI Chicago: "Chris Connnelly lives in Chicago, and I know ASI fairly well. Although there are effects on the album that have been put straight onto DAT with a cheap mic, for vocals we wanted a really clear sound to start with, so we used ASI's best mics at that time – Neumanns, I think – going through a Neve desk with Chris Greene doing the actual recording."

Additional tracking was done at Fortress II, and the whole thing was mixed and edited at the Mattress Factory between February 1999 and April 2000 – except for a mix by The Orb and an M60 Dub track, the latter being mixed by Chris Cookson at 30 Hertz Studio in Manchester. But, since Invisible records are known for issuing albums within weeks of recording, why did it take some 14 months to mix The Damage Manual?

"Well, we could have rushed it out, without checking and re-checking, but I really had to search for the sound in each track. It was totally new territory for all of us, and no-one wanted to make anything that was disrespectful to our previous work, some of which is pretty well-known in certain circles. On a mix, you get to a certain level after five days; another after 15, and so on. With this one I'd mix for a few days then take stuff back to my Waiting Room studio and maybe add a sound or two, and then go and work on someone else's material for a week, before returning to the Mattress Factory with a clearer idea of what I wanted. Edits took some time as well – certain tracks started off at nine minutes, then became six and finally four. Sometimes we cut out thousands of pounds worth of recording, but we had to get to whatever length best suited the arrangement.

"And we did record some 21 numbers in all – none of the seven that were on *One* [The Damage Manual's well-received EP] are on the final album. It's got 14 all-new tracks. Throughout, I had to keep asking myself, 'Have I succeeded in communicating the energy we kicked up?' Hopefully, I have. Hopefully, this is true to the spirit of PiL in 1979 or Killing Joke in '83, or whatever." • *Phil Strongman*

Need to consult The Damage Manual? (L-R) Geordie Walker, Chris Connelly, Jah Wobble and Martin Atkins



The Eye

industry watch

Computer-based recording has taken over in the project studio, but is the same thing now happening in top pro facilities?

Around this time last year I spoke to several engineers from major London recording studios and asked them which personal computer-based audio recording and MIDI sequencing systems they – or, more often, their clients – were using. Their answers, fairly predictably, included Logic Audio, Cubase VST, Studio Vision and Pro Tools. The Mark of the Unicorn 2408 digital audio hardware was also mentioned several times, but not too many people were using MOTU's Digital Performer sequencing software (one of my personal favourites).

Mostly, clients were bringing this software along to sessions themselves, although some studios had one or more in-house – usually one of the sequencers, or sometimes a Pro Tools system in a portable rack that could be used in any of the rooms. There were still some Atari computers knocking around running Notator or Cubase, and some PCs, but the majority of the computers used were Macs. A significant number of studio engineers had made the changeover to hard disk recording, using the Otari Radar 24-track digital recorder, although the majority were still recording to professional analogue or digital open-reel formats.

One year later, it seems things are shifting significantly in the direction of Pro Tools. I recently attended a 'round table' discussion at Strongroom Studios, at which Technical Manager Rob Buckler explained why they had permanently installed two large Pro Tools set-ups. "When we were looking to upgrade the studio, we talked to all our clients and mentioned putting Pro Tools rigs in with plug-ins and big hard drives, and they all jumped for joy. We had been hiring systems in constantly, and, as Pro Tools is made up of so many different parts, inevitably it wouldn't work with each client straight away – wrong software, not enough converters, or whatever. So each time we hired there would be hours of downtime while we got the system set up."

What Strongroom really needed was to be able to treat Pro Tools as if it were a 2" tape machine – and now they can. As Buckler put it, "We simply line Pro Tools up each day, just as we would with a 2" multitrack, then hit play on the SSL and off we go."

Producer Phil Harding immediately asked if the transport controls on the SSL mixing desk could control the Pro Tools transport. It transpired that this was one of the first things that was set up, along with sorting out the sync and patching.

According to Rob Buckler, Pro Tools has been an immediate success. It's now being used for about 60% of current work. "In nine months I think it will be 80% of everything we do here. It just seems to be ramping up."

Phil Harding asked if the analogue multitracks were still regularly being used, and Rob confirmed that they still had four such machines – although probably not for much longer. "I wasn't going to sell any, but the Pro Tools systems have been in constant use since they were installed. We have two 2" machines constantly idle now, because, along with Pro Tools, the usage of systems like Radar has increased, so we are often using Pro Tools and Radar linked. We will end up selling at least one 2" multitrack soon, and the next investment for these studios will be two more Radar 2 machines, plus another full Pro Tools set-up."

Recording engineer Roger Askew, who is not a Pro Tools user, said how much he liked working with the Radar. Rob Buckler agreed, adding "It's like a 2" multitrack in a box. It's a great introduction to hard disk, the audio quality is OK, and it's fast and reliable. Most people who have tried it have never gone back, and the next logical move from there is working totally on Pro Tools. Pro Tools' reliability is improving all the time and when this is totally sorted there will simply be no going back!"

That said, Phil Harding still found it hard to imagine that a band would record straight to Pro Tools, but was assured by Buckler that this is exactly what is happening at Strongroom – Del Amitri is doing precisely that in Studio 1. "They're not recording to Radar or to tape at all, and they've had no problems."

The final word came from Rob Buckler, who concluded, "It's both interesting and frightening to see the centre of attention shift from the mixing desk to a computer screen. Mixing desks are now just glorified preamps set at unity gain!" • *Mike Collins*

Pro Tools – shifting the balance of power away from the open-reel recorder

Around the capital...

John Goldstraw, Technical Manager, Metropolis:

"Pro Tools is being used most of the time these days. We have two of our own 16-bit systems and one 24-bit system with 24 channels of I/O. These are racked up ready to use in any of our rooms. We are also very regularly hiring in Pro Tools systems as well.

"Generally, people are recording directly to Pro Tools, although some clients record to analogue or digital open-reel first. It very much depends on how Pro Tools is being used in the production itself. Nevertheless, we are now finding these systems essential. We invested in a new system about eight months ago and it has been constantly busy since then."

Guy Massey, Studio Engineer, Abbey Road:

"We have just bought two new 24-bit systems and we have been using Pro Tools to load in pre-mixed 5.1 surround recordings so we can mix the dialogue, sound effects and music within Pro Tools for DVD-Video release. We are not using any multichannel plug-ins at this stage, as any 5.1 surround effects have been created at the pre-mix stage.

"We also use Pro Tools systems on music recording sessions to tune up vocals, move parts around, and to do drum edits and so forth. It has been getting much more popular over the last couple of years. Any of our three racked up systems, the older 16-bit system and the two newer 24-bit systems, can be moved into any of the studios here.

"Three or four of our engineers have bought their own systems and they sometimes work on these at home or they take them to other studios that don't have Pro Tools. We normally record to an open-reel format and transfer to Pro Tools to work on stuff later, although I have heard that some people are now recording direct."

Jay Kay tools up

Always on the hunt for cool technology: new and old, funky and classic, Jamiroquai mainman Jay Kay continues to collect vintage keyboards and quality outboard to fill the racks and shelves at his Buckinghamshire country manor-based private studio. Recent pride of place goes to two Focusrite ISA 430 Producer Packs, including built-in digital card. Nick Pope, Studio Manager of Jamiroquai Ltd, says, "Focusrite's ISA 430 is the perfect collaboration of classic analogue processing and modern studio engineering flexibility. The transparency of the compression allows us to tweak Jay's voice and the synths without losing any of their inimitable character."

Speaking of synths, the latest additions to Jay's keyboard collection include a couple of analogue monsters – a Moog Memorymoog programmable polysynth and Roland System 100M modular system, comprised of 15 modules in three racks. "Our keyboard player, Toby, got hold of a Memorymoog from FX Music Control and that inspired Jay Kay to go in the same direction," reveals Nick. "We wanted some old skool analogue synthesizers, and when Music Control offered us the Roland it looked too funky to resist – the sort of thing you can imagine Stevie Wonder playing. Within one day of its delivery, we were putting it to good use in the studio where Jay is currently writing material for the new album."

And that new album, Jamiroquai's fifth, and the second to be recorded at Jay's studio, is likely to incorporate an array of vintage keyboard flavours of the '70s, mixed up with the signature 'Jamiroquai sound' of funk, dance and jazz. Can't wait? Only problem is, we'll all have to wait until summer 2001 to hear it – by which time Jay's System 100M will be celebrating its 20th birthday.

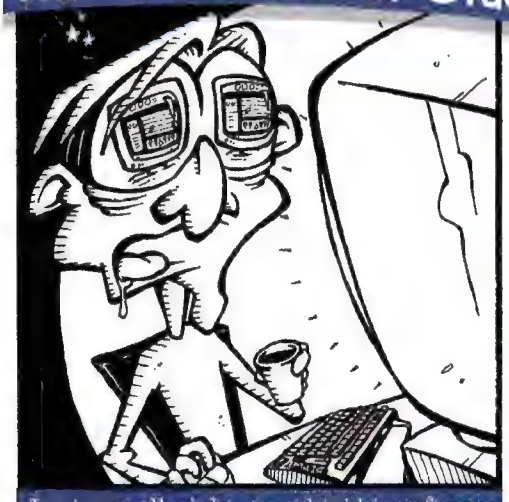
Sisters (are doin' it)...

Future Music turns 100 this month and so FM100 features 100 highlights from a century of FM, as voted for by readers as well as staff old and new; the best 100 music sites on the web, plus 100 cracking tips on making music. Roland's VA-7 keyboard, the Waldorf Q Rack synth and Cubase 5 are all put to the test. Joining the bacchanalian debauchery this month in profiles are A Guy Called Gerald, Eat Static and Ferry Corsten.

So you've created a musical masterpiece – what are you going to do with it now? The October issue of **Computer Music** investigates the possibility of distributing your music through your own website. Is it an avenue of opportunity or a cul-de-sac of despair? You'll also find an interview with UK garage and nu-skool breaks wizard Neil Pollard, plus reviews of Emagic's stunning EXS24 soft sampler, Seasound's tasty-looking Solo recording system and Logic 4.5 – all this, plus the regular barrage of news and tutorials.

computer music
The complete guide for Mac and PC

The adventures of Studio Pro Joe



Joe is up all night, tweakin' his software not getting what he wants.

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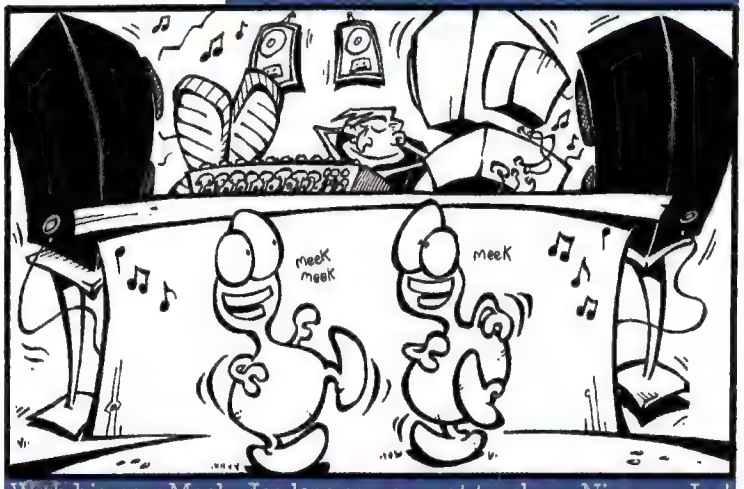
* digi upgrade slot,
* Instrument input
* Ultimate warm channel

VC6Q British Channel:
* 5 stage mic/instrument pre,
* Photo optical compressor,
* HF, MF, MFF, LF, MeQ
* Ideal instrument channel
* 'Superbal' balanced
* Passive instrument in

He falls asleep... ... and dreams of making the perfect mix.



With his new Meek, Joe lays some great tracks... Nice one Joe!

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sound bites

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This is now
Do we really need any more retro-style VST instruments? Why can't manufacturers forget all about this 'analogue synths of yesteryear' stuff and get on with creating some new sounds?

Posh Spice out
Vocoders in dance music – have we all had enough? Should vocoders be banned for at least the next ten years?

So long, Herbert
Is the day of the studio anorak over, or do modern music production methods require more knowledge than ever before?

Write to us:
Open Mic, The Mix,
Future Publishing,
30 Monmouth St,
Bath, England
BA1 2BW

Or email us:
themix@futurenet.co.uk

Inter-breeding

In response to Nick Barron's letter (*No Future*, issue 77), I would like to add my two penneth-worth to the home vs. commercial studio debate. I have a small studio in a garage conversion running a keyboard, FX unit and drum machine through Logic 4.1. It isn't grand – I've only been in this game a year – but I'm already seeing the possibilities afforded me by the internet, freeware and shareware.

As the gap in quality between music produced at home and that conceived in a professional studio appears to be reducing, can Nick, and others like him, not see a possible future opening up via such new media? At present, I invite friends over to play sessions on instruments I do not play. Consequently, I end up as writer, performer and engineer on my own projects. Having worked with me, my friends often then use my room for projects of their own. In my own very small world, I 'receive work'. Little of it is paid, but this is my choice, as I don't consider myself good enough to advertise on or seek work from the internet. I can burn the work to CD, post it on a website for up-and-coming artists, or send that file to almost anyone in the world for further collaboration – and all for the cost of a local phone call.

I am learning a craft, but not through college or training like Nick, although I used my university's studio. I gain experience through trial and error, experimentation and reading. Don't many engineers interviewed in *The Mix* do much the same on much of the same equipment available to people like me?

If someone had told me 10 years ago that I could have written a song, recorded it and then 'broadcast' it on an international stage, instantaneously, virtually for free, from home, I would have got into computers long ago. Who says Nick Barron won't become the engineering guru of the MP3 recording industry, with files emailed to him from all over the world to mix and remix? I wish him all the best!

Ian Stephenson, by email

This month, we've been out and about talking to some of the ever-increasing horde of musicians and producers who are finding fame and fortune – on their own terms – via the net. Wanna know how they're doing it? Turn to page 84...

It's more fun to compute

I'm a keyboard player who likes to record with a PC using my own home-grown sonic creations and some of the excellent sample files available on CDs or free from the internet. This is fine, but my PC is too fragile and bulky to take to gigs, hence I have to buy all sorts of dedicated sound modules, expansion cards and samplers just to play live.

But sound modules tie the user into given sound sets with few options for creativity, and samplers provide expensive sampling, file storage and editing features that simply aren't needed. I suspect most musicians prefer to sample, manipulate and back up their sound data with PCs. My ideal sound module would therefore be cheap, with just lots of rewritable, stay-resident memory to upload chosen sample files via a fast common interface, such as USB. This would compliment my PC, as opposed to duplicating its functionality.

As more music is created with PCs, sample playback – and even synthesizer – modules will be required less as sound sources, and more as portable receptacles for PC-generated sounds and sharers of the CPU load. As PCs get faster and laptops become more affordable, will we want to use sound modules at all?

Ian Drumm, by email

Good point, Ian. We are currently falling between two stools, as it were. On the one hand, a sound module is rather limiting, in so far as you're pretty much stuck with the spec/sounds when you buy it, and PCs are currently too unstable to risk a live session.

But what you suggest – a cheap sound module with rewritable memory – sounds to me like a sampler. And given that envelope shaping and filtering on samplers can be used to take static sampled sounds and create more organic and dynamic sounds I don't really see what you're after.

It's tricky to tailor this answer to your needs, as you don't say what kind of music you are performing. But as far as sound modules go, Roland's JV-1080 can be fitted with expansion boards and has enough editing facilities to give a wide palette of sounds. Their new XV-5080, reviewed in issue 79, is Roland's flagship now and has even more potential for expansion/control. It also has sampling capabilities onboard – up

to 128Mb, which should be enough for the most demanding live set. It's not what you might call cheap, ringing up £1,800 on the till, but perhaps it's worthy of consideration.

Or hang on a bit for the Triton Rack, due out any time now – it'll set you back £1,700. Once again, as well as quality sounds and expansion slots, sampling can be added as an option with more comprehensive facilities for manipulation, such as Time-Slice, Time-Stretch, Crossfade-Loop and visual waveform editing.

And as for using sound modules at all in the future, who can tell? We've looked at soundcards such as the Korg Oasys and the Pulsar II recently, and they sound pretty damn good. When/if PCs are solid enough to rely on in a live situation, the possibilities for live use will be astounding.

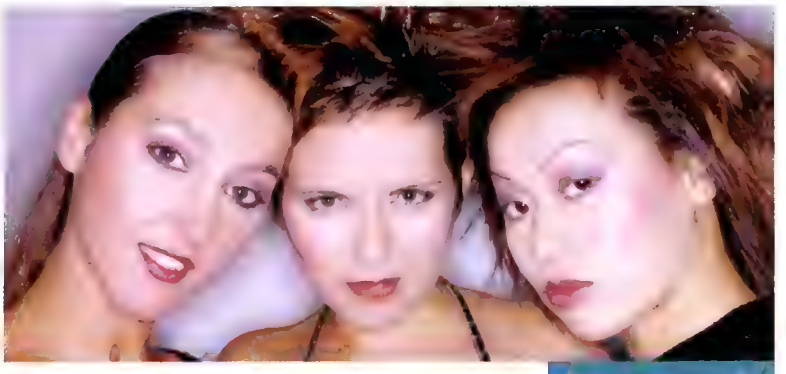
Oz Owen

Never mind the bollocks

I'm writing in response to last month's *Justified and Ancient* letter in *Open Mic*, which unfairly accused *The Mix* of '*NME*-style bollocks' when it comes to certain genres of music.

Over the past ten years, I have seen many 'journos' from some mainstream music magazines consistently slating music simply for being of a certain type. Goth appears to be the musical punch bag of the moment, but as that genre's still rather successful, I feel that just saying, 'It's goth, it's crap' is really not fair. They seem to be misguided into thinking that all goth sounds like The Mission. Okay, then; all dance music sounds like Alice Deejay; all rock music sounds like Bon Jovi, or whatever. (I'm *not* a goth, BTW – that's just one example that annoys me!). Then those gutter snipes have the temerity to turn around and say Suede is good – hello?

The Mix doesn't descend to those depths; I don't think you've ever slated anyone – unlike another music technology magazine I could name, which seems to be following the line that 'Unless it's dance, it's crap!'.



All dance music sounds like Alice Deejay, don'tcha know.

In general, most people will buy whatever they're told to – hence the total obliteration of the Top 40 into Boy/Girl Band Hell. Play someone the same track 40 times a day, *a la* Radio One or GWR, and they're bound to like it in the end. I've had Eminem repeatedly played to me by my brother and I now find myself actually liking the music. This is a very bad sign indeed!

At least with Pink Floyd you knew they were in the charts and famous because they were good – not because they were good-looking.

Ben Marshalsea, by email

I'm not convinced about your claim that repetitive listening will automatically guarantee acceptance, but I'm willing to test the theory. So I hereby challenge The Mix readers to lock themselves in their bedrooms with nothing but a Walkman and The Piper At The Gates of Dawn (or whatever) and listen to it 40 times non-stop. Open Mic will be eagerly awaiting your reports.

As for us never 'slating anyone' – well, our philosophy is that if we think an artist is 'crap', we don't waste our pages (and your time) by featuring them. Makes sense, I think?

Now, where did I put that Eiffel 65 album...

Andrea Robinson

Win this classic workhorse

The author of the best letter we receive each month wins this classic Shure SM58 microphone. So get thinking and writing – it could be you!

letter of the month

Plugging in to the future

I am sure you receive many letters regarding people's likes and dislikes about the content of *The Mix*. These will invariably include newcomers to the industry who ask for articles explaining the more basic principles of making music with modern technology. This is absolutely necessary to capture the interest of new readers, and inspire stars of the future, but has to be balanced with readers, such as myself, who have followed the magazine from issue 1 and are well acquainted with terminology and use of older and current equipment.

With this in mind, I was pleased with the bold move to address software programming of plug-ins in issue 78. Many readers will no doubt be disinterested, or simply not have the appropriate tools for this sort of thing, but I think this area needs explaining and exploiting. Steinberg, with Cubase VST, and Propellerheads, with Rebirth, have helped instigate this new creativity, along with many other independent programmers. I see this as a new way for musicians to be creative; to design custom software modules to manipulate their own sounds. Future generations will be more comfortable using these tools, and I see this as a positive step in creating new music.

Not everyone is going to succeed as an artist, as the key to writing well does not necessarily lie in the technology you use. However, good ideas can often be improved with technology. So, well done for approaching this subject, and disregard any derogatory letters that tell you it belongs in a software magazine.

Ian Courtney, by email

From designing your own sounds to designing your own plug-ins – is it the logical step, or just another distraction from getting on with the business of creating killer tunes? Tell us what you think. And if anyone has produced a unique plug-in that they'd like to share with The Mix readers, get in touch and we'll feature it on our cover CD. Fame awaits...

Andrea Robinson

Power corrupts?

XV-5080 sound module with sample playback R-BUS

Flagship of the XV range that also reads samples, and supports up to 8 expansion boards.

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May issue 74

A cult classic reborn: Kurzweil K2600 pro workstation
Tristin Norwell on producing the latest Embrace album *Drawn from Memory*
Behringer Tube Composer: the new valve-driven compressor on test
Nineteen series: signal processing on a budget
Yamaha MSP10 active nearfields
Samples: Coldcut's *Choice Cuts* collection of killer sounds and loops

June issue 75

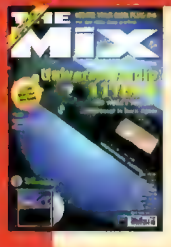
Special filtering issue!
Sherman QMF: the most extreme filter on the planet
Filter round up: we test a dozen of the best hardware and software filters
D.I.Y.: Build your own filter for £44
On test: Roland VSR-880, AMS Neve VX Rack, Yamaha D24, SPL Channel One
Samples: Exclusive sounds from filtered funksters Kojak

July issue 76

Nuendo! Steinberg's stunning new audio production system
Roland DS-90A: the dawn of speaker modelling
Classic sound: Trident Audio S80 Producer Box
Role reversal. Wave's Maximiser plug-in goes hardware
Exclusive samples from Jah Wobble and Amon Tobin: breaks, loops, sounds and vocals

Midsummer issue 77

Remix Special! Insider tips from 14 of the world's HOTTEST remixers
Remix competition: Win a remix deal and have your track released on vinyl
Roland VP-9000 : the revolutionary new sampler is here
Plus. MOTU Digital Performer, Drawmer 1969, Bomb Factory, Korg MS2000, TC Voice Tools
On CD: 50 exclusive samples from remix maestro Paul James



August issue 78

On test: the world's favourite compressor: Universal Audio's 1176LN, plus Korg ElectribeS, CreamWare Pulsar II, Behringer Shark DSP110, Fostex D824, Roland XV-3080, Tube-Tech SMC2A, AKG C2000B and more...
We visit Sawmills studio
In the studio with Globo
Classic sounds: the Mellotron
Win a £500 Sherman Filterbank
Samples from Keith LeBlanc, Globo and Sherman's monster QMF filter
37 free plug-ins on the CD!

September issue 79

On test: Roland's monster sound module, the XV-5080
Cubase 5 – the pro verdict on the latest upgrade to Steinberg's classic sequencer
Emagic's stunning plug-in sampler, the EXS24
Amek's Channel in a Box
We visit London's Orinoco Studio
Copyright-free samples from the Sofa Surfers
New series: starting your own record label
Compression tips for beginners
DIY plug-ins – create your own reverb

Who tests the gear

Our team of equipment reviewers are all audio industry professionals, experts in their chosen fields – engineers, producers, remixers, musicians and software specialists. This means that you can trust the opinions expressed in our reviews.

How the gear is tested

Wherever possible, the gear we test is used in actual sessions. Indeed, some of the biggest-selling records this year will have acted as testbeds for our reviewers. We believe that to truly evaluate kit properly, it needs to be tested in studio conditions – not a dark room!

Impartiality

Reviews in **THE MiX** are in no way biased towards certain manufacturers. We will deliver an impartial verdict on a product whether or not a manufacturer advertises in this magazine. Our first duty is to you, the reader, and our goal is to give you the best possible advice on buying equipment. We will not hesitate to expose sub-standard equipment.

THE MiX EDITOR'S CHOICE

Products that are judged to be outstanding by our reviewers are awarded the 'Editor's Choice' tag. In a standard review, this means that the product offers exceptional performance for the price it retails for. In group tests, there may be two awards – 'Best Performance' and 'Best Value'. The 'Best Performance' award will go to the product that offers the best performance irrespective of price, while the 'Best Value' award will go to the product that offers the best price/performance ratio.

The Mix reviews team

Alan Branch
Producer/engineer/remixer and part of London's famed On-U-Sound production team, Alan's been working in Cuba with Matt Bianco and has completed a dub album with a mystery French sound-system band.

Adam Crute
'Mac fan' Adam manages *The Mix*'s in-house recording studio and masters our cover CD every month. He refuses to let the US Justice Department's decision to split Microsoft in half divide his platform loyalties.

Trevor Curwen
Engineer/producer Trev was the mixmeister behind Portishead's seminal *Portishead* album, no less. Never one for resting on his northern laurels, he's currently working with a Nashville-based singer/songwriter.

Steve Evans
Steve learned his craft on the road and in his own 16-track commercial studio, and has recently produced an album for Saltake, mixed tracks for Countermine and written and produced tracks for Isabelle Gouali.

Adam Fuest
His production credentials take in film soundtracks and acts such as Drugstore, Astrohound and Nu Metal Disco. Adam is based 2,500 feet up in the Brecon Beacons, where he runs his own Twin Peaks residential studio.

David Harrow
'Well-travelled' and 'busy' best describes producer/keyboard player David. As James Hardway, he's recently released new album *Moors + Christians*, recorded in Cuba and Jamaica – alright for some!

Jon Musgrave
A house engineer at London's Roundhouse studios, Jon's diverse credits include Culture Club, Beverley Knight and Mercury Rev. He's recently been working with Shaun Escoffery and Catherine Simoni.

Tim Oliver
Engineer/producer Tim has worked with M People, Gene, New Order, Happy Mondays and a host of other Madchester luminaries. He's currently decamped to Doppler Studios in Atlanta with the Indigo Girls.

Seb Pecchia
Former Real World house engineer Seb's been busy playing foreman on his new studio building site near Bath, but is *still* finding time to master tracks for Ruff Driverz, Asia, Sparks – yes, *that* Sparks – Sniper Dog, Bitty McLean...

Sean Vincent
Such has been Sean's success since his tape-op days at Matrix studios that today he's considering setting up an independent label. He's recently been live mixing for Artful Dodger, Five and everybody's favourite, Billie Piper.

reviews

This month, we check out the Pro version of the revered Line 6 Pod, now revamped for the studio. Plus: preamping the Langevin way, mastering action with Focusrite, plug-ins from DUY and DSound, Roland's latest studio-in-a-box and more

Line 6 Pod Pro

Guitar amp and FX modeller

Price Pod Pro £499 › FB4 £70 › FloorBoard £199
For Great authentic amp sounds
› Quick and easy for experimentation › Good-looking
Against Difficult interface at times
Verdict Great ammunition for the sound palette armoury of any studio

It's incredible to think that it's less than four years since Line 6 came along – they are such a well established part of the scene that you'd think they'd been around for ages. And their success is all down to being one of the first onto the physical modelling bandwagon.

Their products are original, but when it comes to the sound they make, there's hardly an original waveform to be heard. They succeed by imitation – imitating a lot of different amps and cabs that you can change at the push of a button. Guitar techs and roadies aren't happy with this turn of events, but, hey, there are always going to be purists who can't do without the smell of burning tubes.

It was the original Pod that got everything moving – that interesting red, kidney-shaped object that sat at the feet of the more adventurous guitarists. It was the perfect answer for recording guitars in a project studio, where space is at a premium and neighbours are sensitive. You could get a convincing, driven Vox AC30 sound without provoking the environmental health department.

And if you had an idea that a track needed a guitar through a Marshall stack, you could try it out quickly, without wasting hours, and change your mind without feeling stupid. Once you'd established the guitar/amp/cab combination, you could either go with the imitation or spend time creating the original in the knowledge that it *was* going to work.

The audio specifications of the original Pod are not that great for mastering – unbalanced outputs and high noise levels are a couple of the drawbacks, and it's quite an awkward shape for a busy live set-up. It also lacks features you'd associate with a studio preamp.

Overview

Enter the Pod Pro, a 2U rackmounted unit which, apart from the more conventional shape, looks just like the Pod. There's the familiar red colouring, and those chunky retro knobs, and a closer check reveals the features to be pretty similar, too, but with the addition of a few extra switches.

It's aimed at both studio and live environments, and the solid, all-metal construction suggests it could cope with both. Along with a very thorough (and jocular) manual, it comes with a CD-ROM that contains Emagic's SoundDiver software (configured for this particular unit only) on Mac and PC.

The Pod Pro with and without this MIDI editing software are two very different creatures, and for that reason this review starts by considering it alone, because many people won't have a computer to hand. Then we'll look at it partnered with a computer.

There are some unconventional layout features to note: first of all, the input section, if you will, is on the right side, whilst the power switch and phones socket are on the left, whereas most other rack units and amps it's emulating are laid out the opposite way round.

Also back-to-front, although literally correct, are the output sockets. Most units are left and right as you look over the top; the Pod Pro is true left and right, as if you were round the back looking at it. Are we to take this as a statement that Line 6 don't want to be conventional, perhaps?

The design brief was clearly to make it just like the Pod, only with a pro spec. As you use it, you do get the feeling that they may have adhered too much to that brief, and that life could have been made easier with a few ergonomic changes. After all, this is a pro version – and pros are quite demanding.

The input section consists of a 1/4" jack socket on the front, for guitar, and a line level jack socket on the rear. Above the guitar socket is a switch to choose between the two. The only metering is a green signal present LED and red input clip LED. There's not really any desperate need for more metering, but it would be useful to have an output meter at times.

CD info

track 04
Yesteryear's amps modelled by the skipful: Vox AC30, 1959 Fender Bassman, 1965 Marshall JTM-45 and more virtual wonders...

words **Tim Oliver** images **Gavin Roberts**

Line 6 Pod Pro: add spice to those limp sounds, whatever their origin

That said, you couldn't ask for better output facilities. There are analogue pairs of balanced XLRs and unbalanced 1/4" jacks, as well as both AES/EBU and S/PDIF digital outputs. So if there's a latency delay through your hard disk recorder, you can monitor via the balanced analogue outs and record via digital straight to disk.

There's even a digital output gain knob on the front panel and a BNC word clock input on the rear for accurate sync, together with a digital sync switch on the front to select sample rate (44.1kHz, 48kHz or external). Whilst we're round the back, there's a stereo effects loop and an unprocessed guitar output, useful for re-amping and other tomfoolery. There's also MIDI In and Out and a foot pedal socket.

Perhaps the most immediate criticism of the Pod Pro is the ease-of-use stakes, or, more precisely, lack thereof – giving shift buttons and multi-function knobs to a guitarist isn't a great idea. To access a lot of the new controls you have to hold down the tap tempo button (as you would a with a computer shift key), and that involves two hands, which leaves a dangerous axe swinging free while you attempt an edit.

So, the first impression that this is just the same as the Pod, only posher (and more expensive), is wrong, because there are many hidden functions. This operational problem could maybe have been avoided by using smaller knobs, and more of them. But, then again, it wouldn't have looked like a grown-up version of the Pod.

The amp models selector is still the most interesting and radical feature (see the *Amps And Effects* box on page 30 for a rundown). It's basically the preset selector, calling up the particular amp sound and a combination of all the front panel controls. The physical setting of the controls are therefore meaningless, and there's not any nulling to show you where they should be. However, as soon as you move one – for example, the drive control or a tone control, it becomes active, and the physical position takes over. »

specifications

Amp models
32

Digital effects
16

Factory presets
36

User-programmable channels
36

Inputs
2 x 1/4" jack, line/instrument

Outputs
XLR, 1/4" jack, headphone

Digital out
24-bit AES/EBU, S/PDIF

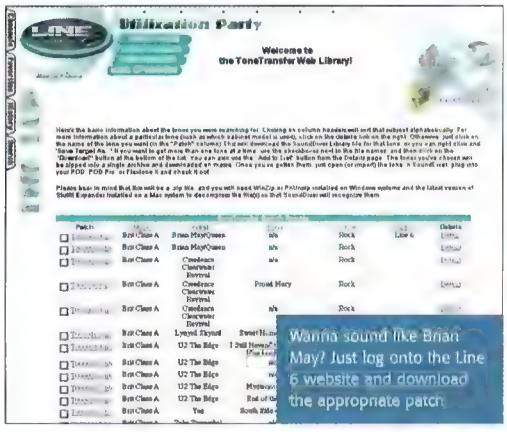
Word clock
In

Digital sync'ing
44.1/48kHz/external

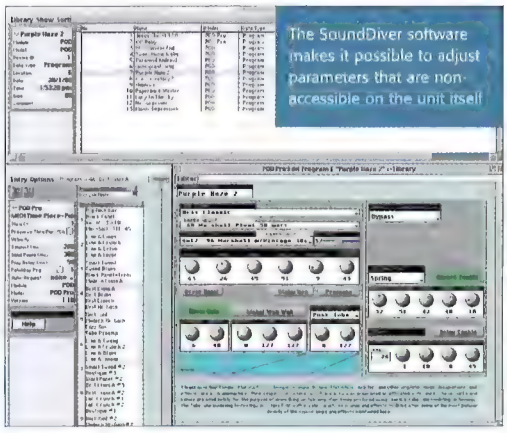
optional extras

FB4 £70
- 4-way preset switcher

FloorBoard £199
- Remote channel/bank switching
- Wah and volume pedal
- Tap-tempo
- Tuner
- Stomp-box-style effects on/off



Wanna sound like Brian May? Just log onto the Line 6 website and download the appropriate patch


The SoundDiver software makes it possible to adjust parameters that are non-accessible on the unit itself

Neither is there a compare key to check whether you are actually worsening a preset, which might have been useful, though you do get a total of 32 different amp sounds, anyway – 16 more than the original Pod. But in order to access the other 16, you have to hold down the tap button while turning the amp models selector, though there's no way of telling from the front panel which amp sound has been recalled – without looking in the manual.

Another great development on the Pod Pro is that you can mix and match cabinets. So, although the amp models come up with their usual cab companion, you could, for example, have a Vox AC30 head going through a 4x10 cab, rather than the usual 2x12. But – you've guessed it – to change the cab involves holding the tap button while turning the effects selector. Okay, but at least you can read what cab you're selecting from the front panel.

One of the major criticisms of the original Pod was that you couldn't edit the effects to any great extent. Beyond inaccurately tapping in a tempo for delay times, there were scant editing possibilities. This has changed for the better, with some of the hidden functions assigned to control more important effects parameters, such as delay feedback and delay level. There are those who will want still more control, though.

The effects presets are pretty much the same (again, see the *Amps And Effects* box on page 30 for a rundown). The other hidden functions behind the front panel controllers are all switches disguised as knobs. You can turn the distortion, boost or presence on or off with the turn of a knob.

The user memory is still small, with nine banks of four patches, and there's no way of giving the patches a name as there's no screen, so you have to remember the number you gave it. You're probably thinking the same thing by now – there's far too much going on here for there *not* to be a screen. You'd be able to see all the amps available, name your own patches, access many more parameters *and* have a hand free to keep your guitar under control. The authentic rotary knobs could still exist as 'soft' knobs under a large screen.

But, layout and operation gripes aside, the sound of the thing more than makes up for it. From a technical point of view, the sound has been improved in a number of ways – the modelling software has been updated, all signs of aliasing have been removed, and the converters have been upgraded to give a much sharper, focused sound compared to the original.

The amps are hugely authentic, and, although you're always going to want to tweak the presets, just as you would with an amp, they are all useable, even unedited in preset form as a typical setting for that particular amp. The great thing here is that all the peripheral noises that make up the experience are present – the buzzes and the hums. And there's a built-in noise gate if it all gets too much for you. The Pod Pro has not been cleaned up and sterilised like some units around, and there's edge and warmth to the sounds, with a sense of air from the cabs.

Talking of air and cabs, it would have been neat to have introduced a variety of mic positions for this pro version – the technology is certainly capable of such a thing. Of particular note for authenticity are the presets emulating the Vox AC30, the Fender Deluxe Reverb and the Fender Bassman. The latter two are both pure blues tones straight out of the box – no messing

16 named, tweakable amp models at your fingertips – 16 more are but a push of the tap button away

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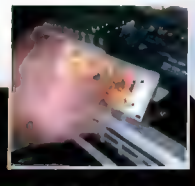

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Amps and effects

Amps

- '52 Fender Deluxe
- '59 Fender Bassman
- '65 Fender Deluxe
- '96 Matchless Chieftain
- '63 Vox AC30
- '65 Marshall JTM-45
- '68 Marshall Plexi 50watt
- '90 Marshall JCM-800
- '94 Mesa Boogie Dual Rectifier Tremoverb Combo
- '89 Soldano X88R Preamp
- '60s Dallas Arbiter Fuzz Face
- Fender Deluxe and Bassman (with more tone control range)
- '68 Marshall Plexi 50W
- '60 Tweed Fender Champ
- Budda Twinmaster Head
- '65 Blackface Fender Twin
- '60 Vox AC15
- '60 Vox AC30
- '85 Mesa Boogie Mark IIc+ Clean Channel
- '85 Mesa Boogie Mark IIc+ Drive Channel
- Dumble Overdrive Special Clean Channel
- '95 Mesa Boogie Dual Rectifier Head
- '89 Soldano SLO Super Lead Overdrive
- Dumble Overdrive Special Drive Channel
- '87 Roland JC-120
- Tube Instrument Preamp
- Line 6 21st Century Clean
- Line 6 Thick Grindage
- Line 6 Industrial Strength OD
- Line 6 Clean Meets Psychotic Drive

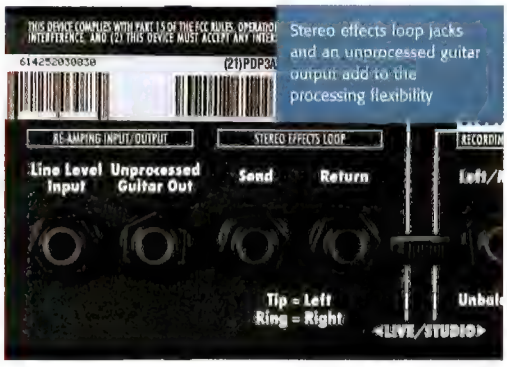
Cabs

- 1 x 8
- 1 x 12
- 2 x 12
- 4 x 10
- 4 x 12

Effects

- Compressor
- Tremolo
- Chorus x2
- Flanger x2
- Rotary Speaker
- Delay
- Delay/Compressor
- Delay/Tremolo
- Delay/Chorus x2
- Delay/Flanger x2
- Delay/Swell

16 popular presets at the turn of a knob – what could be quicker?



Stereo effects loop jacks and an unprocessed guitar output add to the processing flexibility

needed. The Vox AC30 comes out a bit on the polite and light side, but with a dash of drive, and a bit of bottom boost, it comes into its own.

Computer control

If the operation seems a little clumsy as a free-standing unit, and there's a computer to hand, then the accompanying SoundDiver software is an absolute necessity. Not only can you edit everything with just one hand (using the mouse), it's also possible to access parameters that you can't access via the front panel, *and* you can see the physical position of all the controls and what amp model is in use at a glance.

You can input delay times in milliseconds, control decay, density and diffusion of the reverb and edit all the parameters of the effect in use. There's also an infinite user-memory in the form of the hard disk, and each user-patch can be named and logged in a library.

What's even neater is the Line 6 website, where there are downloadable patches of particular guitar sounds. You want a guitar sound like Jimi Hendrix's 'Purple Haze'? 'No problem, sir. We'll log on and get it for you.' Just type in the artist you want, hit the search button, and there you have it.

This will be nothing new to Pod originals, but it really comes into its own for a studio unit, because it can be permanently plumbed in and treated almost as one being. There's no doubt that this makes the difference between a passable and great piece of equipment.

Dialling up quick sounds is easy, but if you want to do any serious editing, which you will after a while, then it's too much like hard work without the software.

The Pod Pro need not just be confined to guitar sounds. With the line level input as well, anything can be put through it – keyboards, loops, vocals; in fact, any noise you want can be livened up and given its own space and authority. It's a great unit to have in the studio to add spice to a limp sound, even if it just means using the tube preamp model setting for a bit of valve warmth. And you can make real-time changes to sounds by recording changes into the sequencer.

For live guitar performance, the optional foot controller is a must. This all-steel affair gives you a volume pedal, a wah pedal with on/off switch to kick the effect out, and stomp-box on/off switches of the Pod's effects. There's also control of the tap tempo and tuner facilities. The onboard tuner is a chromatic type that shows the note value and arrows for tuning indication. It mutes the output when switched in.

Verdict

Those familiar with the original Pod will be immediately at home with the Pod Pro. It's laid out more or less identically, and, on the surface, does exactly the same as the original, only with a better spec.

But look below the surface and there's much more to the Pod Pro – 16 more amp models, flexible head/cab combinations, and more editable parameters. The trouble is that there's really too much going on to access everything easily via the front panel. Many functions use a shift button, which need two hands to operate, and it's not possible to know the actual position of many of the knobs when a preset is recalled, or compare changes when edits are made.

Accommodating this level of complexity really requires a screen, and as you get to know this box you really start to need one. Thankfully, the Pod Pro comes with Emagic's SoundDiver software, which is simple and easy to use, allowing you to access even more parameters than you can on the unit itself. But the bottom line is that the Pod Pro sounds superb and should become a vital piece of equipment in all levels of studios, and not just guitar-oriented ones – especially considering the price.

More from: Line 6 UK, Butler's House, Clifton Road, Rugby, Warwickshire CV21 3RW
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The Pod Pro is extremely well-endowed in the output department

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Technology with Soul.

Langevin Dual Vocal Combo

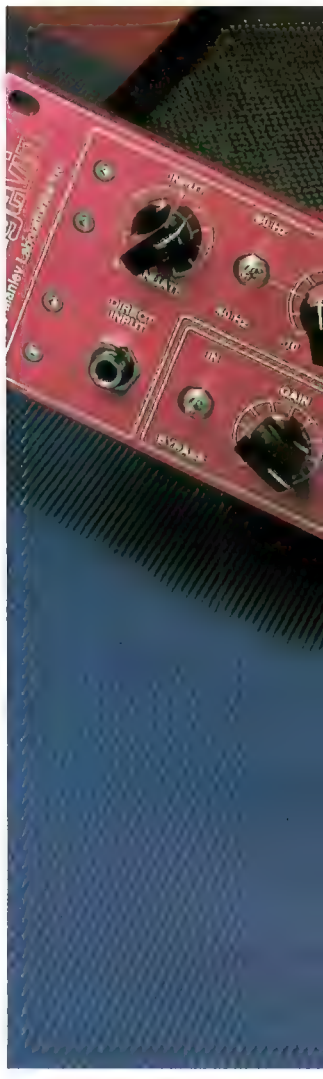
Dual-channel mic preamp

Price £1,639

For Sounds lovely › Looks lovely › Impeccable build quality

Against Not a fully-featured channel strip › Not a lot of gain › No phase reverse switch

Verdict Warm, musical and not a valve in sight



Judging by the ever-increasing number of valve-based designs on the market these days, you could be forgiven for believing the valve is some kind of recently discovered, magical cure-it-all device. Of course, if you did come to this conclusion, then you would have fallen – hook, line and sinker – for a truly global marketing conspiracy.

At the core of this global master plan is our latent desire to 'warm up' all those nasty digital signals we all have to contend with these days. Conveniently, valves are associated both with audio's analogue heritage, where warmth was the only option, and also with generating heat. So, basically a marketing manager's dream, then.

But back here in the real world, of course, things are not always quite that simple. If manufacturers are returning to valve-based designs for amplifying signals, then it is because they're actually rather good at it, albeit a tad more cumbersome and fragile than their solid-state counterparts.

However, to believe valves are the only option would also be foolish. Take a quick look at history's most revered designs – Focusrite, API, Langevin, Neve, GML, to name but a few – and there's not a valve in sight.

So where's this all leading? Langevin – pronounced with a soft 'g', by the way – was one of the first pro audio companies back in the '50s and '60s. First they produced valve-based equipment, then transistor-based gear, and their transistor mic preamps gained them quite a in reputation the recording industry.

In 1992 Manley Labs bought the rights to the Langevin name and designs. Manley's reputation up to this point was as a manufacturer of high quality valve gear for audio and hi-fi. So, over the last few years, they've developed the Langevin name to cover their solid-state products. These include updated versions of classic Langevin designs and the Pultec EQP1A equaliser. The latest in the Langevin range combines two existing units, the dual mic pre with EQ and the dual opto-limiter – hence the 'Dual Vocal Combo' tag.

Overview

As you have probably gathered, the Dual Vocal Combo is a twin-channel unit, offering a mic pre-stage with EQ, in this case passive, and then an opto-limiter, with stereo link option. The electronics are discrete transistor, so there are no op-amps in the signal path – although there are a couple driving the meter circuits.

As the name suggests, the Langevin is designed with vocal recording in mind, and could seem a little basic compared to other channel strip designs. But the philosophy here is one of simplicity. The EQ is shelving, and at only two selectable frequencies for each band.

The opto-limiter is also a very simple design, with only gain reduction and gain make-up controls. To allow connection of high impedance sources, the Langevin does feature a front panel jack connection, which is a nice feature. So, in essence, this unit is all about getting the cleanest signal to your recorder of choice at the right level with the minimum of fuss.

With the rights to the old Langevin designs, as mentioned above, Manley have been able to modify some of the characteristics, and improve upon, some of the components used in the '60s. The mic pre is therefore a modified version of the original Langevin AM-4 channel strip.

It incorporates Manley's own '6469' transformer mic amp stage and is a Class A discrete amplifier design, which uses a minimum level of negative feedback. It offers up to 53dB of gain, if you modify the internal trimmer, although it is factory set to a maximum 45dB.

There are two shelving EQ bands, offering 10dB of cut/boost at selectable frequencies – 40Hz and 80Hz for the low band, and 8kHz and 12kHz for the high band. As you would expect, the EQ can be completely bypassed, if so desired.

Phantom power (48V) can be selected individually for each channel, and switches are of the 'pull-to-latch' type, which avoids any accidental loss of mic power. Unfortunately, there's no phase reverse switch, which is a bit of a pain.

CD info

track 05

Hear the features of the Langevin Dual Vocal Combo bravely applied to the dulcet tones of our very own Jon Musgrave

words **Jon Musgrave** images **Gavin Roberts**

Yesteryear's solid-state technology refined to meet the demands of the digital recording age

specifications

Frequency response
Mic pre: 20Hz to 20kHz (±1dB)
Limiter: 20Hz to 50kHz (±0.5dB)

THD
Mic pre: 0.075% (1kHz @ +4dBm)
Limiter: 0.06% (1kHz @ +4dBm)

Max gain
Instrument input: 25dB
Limiter: 15dB

Max limiting
20dB

Attack time
20ms

Release time
500ms

Input impedance
2400Ω (optimal for mics with 100 to 600Ω impedances)

Instrument input
150kΩ

Output impedance
11Ω balanced
6Ω unbalanced

Power
20W

Dimensions
483 x 89 x 254mm

Weight
9.1kg

The opto-limiter is also based on the old Langevin designs, but incorporates some elements of the Universal Audio LA limiter designs. Manley have already put this type of design into use in their valve units. So, this is essentially a solid-state version of the Manley opto-limiter.

The opto circuit makes use of a Vactrol cell (a component incorporating a light-dependent resistor and a light source). This has certain inherent response characteristics that dictate the behaviour of the limiter. As with the classic opto limiters – Universal Audio's LA series, for example, the controls are pretty straightforward: reduction and gain make-up.

However, this simplicity hides quite complex response characteristics. In essence, the unit has a pretty fast attack, but tends to be faster if the transient is faster. The gain reduction is again dependent on the level of the signal – the higher the level, the higher the ratio, up to a maximum reduction of around 20dB.

Similarly, the release characteristics are signal-dependent, but are between 10 and 20 times slower than the attack rates. Thankfully, the VU meter can be switched to gain reduction, as well as output level, so you can see what's going on. The gain make-up control itself offers an additional 15dB of gain, which brings all but the most heavily compressed signals back up to a reasonable level.

A quick look under the Langevin's lid reveals an extremely tidy and well-constructed unit. The mic transformer and mains transformer are both custom-made Manley devices, and the wiring and circuit board quality are exemplary.

Removal of the grille-style lid is very easy, requiring removal of only two screws. This is useful as the lid needs removing to access the various trim pots that line up the meters, adjust the stereo linking, and tweak the mic amp gain range (which can be changed from 38dB to 53dB maximum).

The back panel is also very well laid-out. The IEC mains socket is dead-centre, with accompanying slow-blow fuse access. As seems common with pro gear, there are also two earthing posts, one connected to the circuit earth, the other to the case and mains earth. This is very useful for removing that unwanted ground loop that sometimes appears for no apparent reason.

Audio connections are pretty straightforward and mirrored for both channels – the mic input and channel output are both on XLRs. However, there

Types of compressor

The function of a compressor may seem quite straightforward – to change the level of a signal through some form of gain control device. However the type of device and the surrounding components all have a significant impact on the way such a unit sounds as it compresses the signal. Not surprisingly, different designs have been tried over the years.

By far and away the most common design these days is based around a voltage-controlled amplifier (VCA). VCAs are chips, and are readily available at reasonable prices. They are also both fast and flexible. The art of VCA design is to tailor the sidechain element to achieve the response characteristics you're after, and also to keep the actual audio signal as clean as possible.

A far less common style of compressor is the variable MU design, as found in the classic Fairchild 660/670 model. This makes use of the variable resistance characteristics of a valve to control the signal gain. Due to their rarity, Fairchild compressors cost an absolute fortune on the second-hand market (and weigh a lot due to the power transformers).

More common than variable MU compressors are opto-type compressors. Here the signal passes through a light dependent resistor (also called a photocell). A split of the input signal feeds an LED, or similar device, which lights up the photocell. As the signal gets louder so does the LED, thus increasing the resistance of the photocell, effectively turning down the signal. Of course, it's the interaction of the LED and photocell that create the classic opto characteristics. Typical examples are the Teletronix LA-2 and the Universal Audio LA-3.

Dark side of the Langevin: a very well laid out (and specified) back panel makes for easy connections

is also a balanced input to the limiter circuit on a TRS jack socket. This actually cuts the mic channel signal, so unfortunately it's not possible to use the mic pre and limiter on separate signals.

In addition to the balanced output, there is also an unbalanced one on a TS jack socket. The reason for this is that the output is transformerless, so connecting the balanced output to an unbalanced input will result in a 6dB loss in level and a little distortion, probably.

In use

The first thing you'll notice with the Langevin is that it's actually quite heavy, even though there's plenty of room for air to circulate. This must in part be due to the many traditional components (capacitors, resistors and transistors rather than ICs). Also rather striking is the red brushed steel front panel and traditional black knobs. All in all, the unit feels very solidly constructed and combines traditional and contemporary styling to good effect.

On powering up, the meters take a couple of seconds to settle down and come to rest either at zero or below –20dB – depending on whether they're set to output or gain reduction. It's probably worth explaining at this point that the Dual Vocal Combo has a number of trim pots to align the meters, set the gain ranges of the inputs and even trim the 36V DC supply to the circuit board (14 trim pots in total).

Thankfully, in the normal course of events you won't have to go near more than a few of these, and then only to tweak the stereo link and meter zeroing. However, Manley do warn that the unit could take 15 minutes to settle down after power on, and also that the meters may drift by half a dB over the course of the day. In fact, the review unit seemed quite good in this respect, with only a little tweaking needed to fine-tune stereo limiting.

Although aimed at vocal recording, the Langevin test kicked off using a classical guitar. This proved quite interesting, as it felt as if we were using a lot of gain, with the attenuator knob at well over a quarter past, but, in fact, this is what you might expect – 40dB of gain for miking a quietly-played classical guitar is about right. However, because you are essentially attenuating the mic amp circuit, it's stunningly quiet.

Switching in the EQ proves very encouraging with the 12kHz band adding some useful 'air' to the sound. For this application, the limiter also produces good results. One thing that is worth checking is that the limiter gain make-up is at unity. As this isn't marked, it's a case of trial and error, but basically it's at about one o'clock. Of course, also worth bearing in mind is that the limiter circuit incorporates a further 15dB of gain, should the mic amp really not prove to be enough. This may prove quite useful if the 25dB of gain you get at the instrument jack input on the front is not enough.

Moving on to some vocal recording, the Langevin really came into its own. Even if you have a favoured compressor for recording vocals, you may find yourself trying the opto-limiter out, anyway. Of course, if you're trying to get the cleanest signal to tape, there really is no need going anywhere near any other bit of gear, apart from the tape machine.

The opto-limiter is ideal for vocals – it's as simple as that. As far as the sound of the unit is concerned, strange as it may seem, 'warm' is a term that springs to mind, but also natural and real-sounding.

Finally, linking the two channels for stereo limiting was very straightforward. Both sets of controls remain active, with the control voltages generated by each channel being combined to achieve stereo limiting.

Verdict

The Dual Vocal Combo is not a 'do-everything', bells-and-whistles-style channel strip – neither does it have bags of gain, so it's probably not a first choice for ambient location recording. What it does have is a character of its own, both as a mic pre and as a limiter.

A few pieces of gear have been hard to part with over the past year, and, strangely, they always seem to be mic preamps – Focusrite's Producer Pack immediately springs to mind here. The reason quite simply is that when you get your hands on gear like the Langevin, you tend to rediscover just how good things can sound without resorting to EQ'ing and other corrective procedures. Do we really have to give it back? Oh, alright, then...

More from: Raper and Wayman, Unit 3, Crusader Estate, 167 Hermitage Road, Manor House, London N4 1LZ Tel: 020 8800 8288 Web: www.raperandwayman.com

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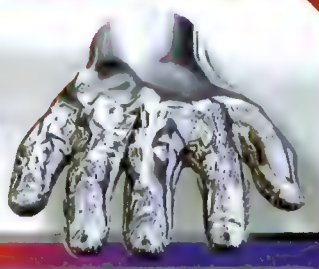

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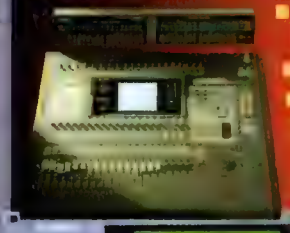

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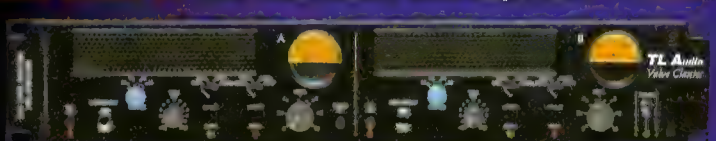

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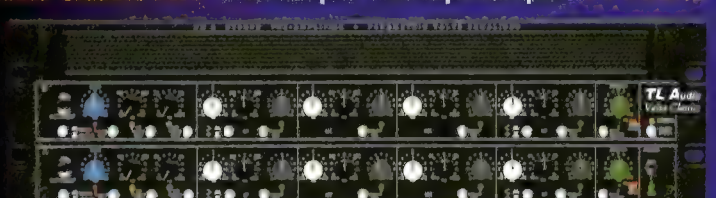

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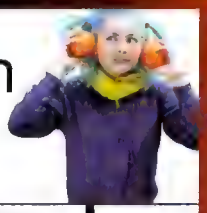

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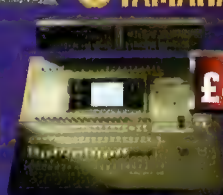

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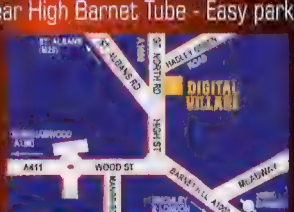

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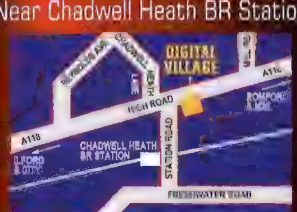

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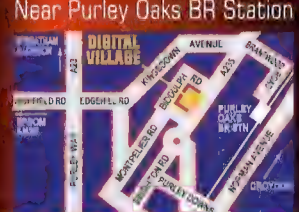

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Details available on request

Rode NT3

Single-pattern condenser microphone

Price £199

For Solid construction › Competitively-priced

Against Heavy › No bass roll-off filter › No attenuation pad

Verdict A robust mic with a quality sound, but too inflexible to be a good all-rounder

Rode microphones know how to tickle the taste buds and those Aussies have previously turned things upside down by delivering quality mics, such as the Classic II and Broadcaster, at prices to seriously challenge the competition. So news that another sibling is joining the Rode NT pack has got to be worth a look.

When the NT2 launched the NT range it made quite an impact with its solid construction and quality results. Then, releasing the NT1 (rather confusingly *after* the NT2), Rode made greater inroads with domestic and pro users alike. Selling for under £200, the new family member, the NT3, is a condenser microphone that's well-placed to take an even greater bite out of the budget market.

Overview

There's no doubt that the slender NT3 has been designed to withstand the rigours of stage life, as well as more delicate studio applications. The most striking thing to notice when lifting it out of its pouch is the weight – 600g – making it around twice as heavy as other mics in this price range. It comes supplied with a stand mount and adapter, which is just as well, because this mic is suited to stands.

The NT3 only offers a fixed hypercardioid polar pattern, limiting its suitability for some applications, but a full frequency response makes it capable of capturing the depth of low frequencies. Unfortunately, the omission of a low-cut filter switch means that an external filter needs to be employed for many applications, as this kind of low frequency response is often unnecessary and unwanted, but, considering many desks now have low-cut filters, this needn't be a big problem.

The 19mm capsule is shock-mounted internally, making the NT3 less susceptible to vibrations and disturbances – a real advantage, particularly for the rigours of the road.

Phantom power can be used to charge the NT3, but there's also housing for a 9V battery in the mic case. This is useful when a desk or preamp can't provide phantom power or in situations involving field and location work where the mic may be running directly into a DAT or tape machine. Of course, when given the choice it's better to opt for phantom power where possible, as it usually guarantees better headroom and more stability with the high frequency response and fast transients.

A neat little feature is the battery status indicator above the power switch, which, when the mic is turned on, briefly flashes to indicate that the battery is good. Should it stay lit for a while longer, then the battery probably needs changing. However, it's worth bearing in mind that the recommended alkaline batteries should last for at least 400 hours, so it will be quite a while before that feature really comes into its own – unless the mic is accidentally left switched on.

In use

A Mackie 8•Bus supplied the phantom power needed by the NT3, and, after switching, on it only took a few seconds to settle down before the signal path sounded impressively clean.

The frequency response chart indicates a presence peak between 3-4kHz and a lift above 12kHz that was clearly evident when used on vocals. The extra presence helped to bring the vocal forward without any additional EQ – handy if a track needs an upfront vocal. With some vocals, however, the upper frequency lift gave a brightness that leaned toward harshness, exaggerating sibilance (always a potential problem) and making the mic unsuitable for some vocalists, unless you insert a de-esser to tone down this sensitivity.

Singing closely to the mic for more intimate vocals highlighted the proximity effect, showing off the full bass range. Unfortunately, this made popping much more problematic. But by backing off from the mic slightly, switching in the desk's low-cut filter and using an external pop shield, far more pleasant results were easily achieved.

With overhead miking duties on a drum kit, the NT3 really captured the bright, airy quality of the cymbals, benefiting, as they do, from the upper frequency lift. Again, a roll-off filter would minimise the low frequency pick-up – however, the desk's low-cut was switched in once again.

The rather impressive 140dB maximum sound pressure level does leave scope for the mic to be used with other pieces of the drum kit, though in practice a pad switch would be helpful for quick attenuation of the level when dealing with a more thrashing, heavy-handed drumming style.

When taken slightly away from the sound source, the NT3 had quite a spacious sound quality that worked really well with a multi-percussive set-up. The low-end definition helped bring out the bass boom in congas,

words
Jim Warboy
images
Gavin Roberts

The no-nonsense Rode NT3: quality sound without the frills

while the high frequencies of shakers and tambourines were clearly captured.

Next up, we recorded a violin. These instruments can be prone to sounding a tad harsh, but adjusting the mic distance a few feet above the instrument helped to find the right balance. A cardioid pattern would have been useful here to capture a slightly wider field.

Using the battery option was great for a spot of location work out and about with a DAT, although the weight of the mic, and its sensitivity to low-end bass rumble, made a stand indispensable for best results.

Verdict

The NT3 hasn't been dressed up with much more than the bare essentials, and this, no doubt, is in response to the fact that many people now have access to fairly well-specified desks that provide pad and bass roll-off switches. If that's the case, then why spend extra for a mic with these features on it? But, nevertheless, these are always handy additions on a mic itself.

That said, the NT3 produces quality results, and that backs up the feeling that Rode have concentrated on the sound rather than the features.

The battery power option is a definite plus for anyone lacking phantom power, or for those into location work without preamps and desks, but then it's these situations where a bass roll-off is really handy.

The fixed polar pattern makes the NT3 inflexible as an all-rounder, although it is suitable for many different applications. And remember, we are talking under £200 here. Given this recommended price, there are quite a few competitors out there, but if features like pad and roll-off aren't essentials for you, then the NT3 could be right up your street. And given the rugged build quality, if you *do* opt for the NT3, it will last for years.

More from: HHB Communications, 73-75 Scrubs Lane, London NW10 6QU Tel: 020 8962 5000 Web: www.hhb.co.uk

specifications

Type
Condenser

Polar pattern
Hypercardioid

Frequency response
20Hz to 20kHz ±2dB

Sensitivity
12mV/Pa

Max SPL
140dB

Power
9V battery

Phantom power
48V max

Weight
600g (without battery)

DUY EverPack

Mastering and reverb Mac plug-in bundle

Price £299

For Great valve emulation ⓘ Stunning stereo enhancement from DUY Wide ⓘ Plush-sounding reverbs from Z-Room

Against Complex in parts ⓘ Some buttons lost amongst the shadows ⓘ Parameter terms make for hard work

Verdict The results can be stunning given time and patience – worth it just for the DaD Valve plug-in alone

words
Seb Pecchia

CD info

track 01
The five EverPack plug-ins in software demo form

track 08
Hear the EverPack in action on our audio demo

'Bundle' is a word that used to be commonly associated with getting drunk at a student party and jumping on some poor defenceless dork whilst eating a curry. These days – having grown up a bit *[ha, ha – Ed]* – it's also becoming a popular term for putting a whole wealth of computer software onto a CD-ROM, selling it as a plug-in bundle and charging a tidy sum for the pleasure.

The advantage is supposed to be that you get more for your money, as opposed to buying each piece of software individually. That's the theory, anyway.

So this month's bundle comes from the DUY team. Famous for the DsPider, and the ReDspider, they also have an extensive set of other tools for the ever-expanding group of plug-in fans. Now they've put them together on a CD-ROM and called them the EverPack.

Overview

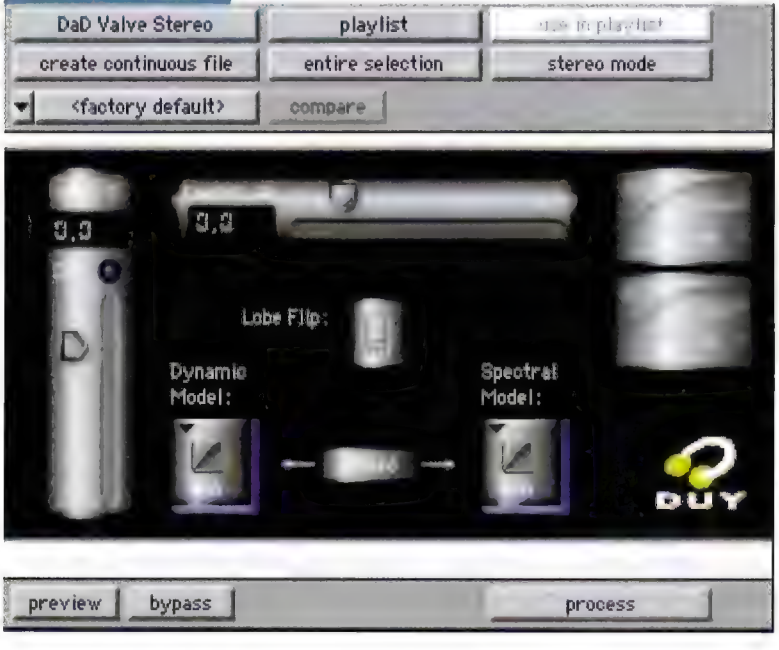
The EverPack is supposed to have a bit of everything you should ever need in the plug-in world, and, as the DUY team have proved their worth before, you'd be a fool not to give this lot a glance. So what do you get, then? Well, how's about this bunch: DaD Valve, DUY Shape, Max DUY, DUY Wide and DUY Z-Room – a fair amount for the money. They're all presented as multi-format files, so can be run on MAS, VST, RTAS for 001 users, and Premiere and AudioSuite for Pro Tools users.

So much is involved in the EverPack that it will be hard graft to squeeze everything into this single review, but we will pick the best and worst bits and conclude from there.

To run our version, we used the AudioSuite in Pro Tools running on a 400MHz PowerMac. If you are going to run it on another system then it goes without saying that you really need the most powerful machine you can get your hands on.

The interfaces for each look very hi-tech, with what (at first glance) appear to be neatly laid-out control surfaces. On second glance, you'll need to get your reading glasses out!

Plug in DaD Valve and you might never want to unplug it again...



DaD Valve

Well, raised eyebrows is the first reaction to DaD Valve, simply because we're talking about a plug-in that creates valve warmth in the digital domain. Even the most hardy Amp Farm fan will tell you it *isn't* quite like using the real thing.

Let's not get into a great debate about valves, but basically there are many different types and makes. Some are better for certain applications than others, and that makes a software designer's job all the more difficult. Saying that, there are some formulae to be followed. Firstly, valves don't clip, and secondly, everyone loves the sound they create. If you can meet these criteria you're well on the way to success.

The layout of Valve is very intuitive, with controls such as Input, Pusher, Spectral and Dynamic Model, Lobe Flip and Output dB levels. It's all bright and colourful in appearance, and mouse-friendly – clicking and moving around the control area is straightforward.

The input level stage has three elements – slider, bargraph and overflow. An input level slider is made available to the user in order to set an optimum operating level. The Pusher sets the operating level of the dynamics section and determines, to some extent, the amount of its non-linearity – the drive of the valve effect, basically.

A bargraph indicator shows the amount of distortion being provided by the Pusher, but don't rely on it, as it doesn't appear to be that accurate.

Then there are the spectral and dynamic models. These are the control characteristics of a real valve: spectral deals with frequency and transient response and dynamics deals with that wonderful harmonic distortion that we all love.

In the spectrum modelling section, it is important to realise that you are not dealing with a fancy equaliser. This is due to the fact that the frequency response changes according to the input signal's frequency spectrum. The frequency response also changes as you change the valve's operating point with the Pusher. Just to add some extra flavour to the signal, you can also get a little non-linear feedback happening, as you might with a valve microphone, and it all sounds very authentic indeed.

The dynamics model section produces harmonic distortion identical to the inherent non-linear transfer function of a real valve, both complementing and interacting with the spectrum model. Both sections are necessary for a complete simulation.

The presets combine with each other to emulate a smooth and palatable sound, especially on a stereo drum sample. It just imparts a little something that wasn't there originally. It can even be used over a finished mix, which will surely appeal to mastering engineers – really warm, smooth, valve juiciness.

This plug-in doesn't require a physics degree to get to grips with, and can be put to fast, effective use in an instant. You can't ask for more than that, given the complexity of the function it fulfils.

DUY Shape

Shape is a sound-enhancing tool, and DUY base it around something called FDWS technology, or Frequency Dependent WaveShaping. Essentially, it's a programmable 3-band waveshaper with full audio range continuous-crossover points. Still confused? So were we. It's really a very complex equaliser, with more besides, allowing complete control over source audio in mono or stereo channels.

Layout is again very colourful, but some of the function keys start to get lost amongst the graphics, which is akin to having buttons that fall off badly-built equipment! There's no excuse for dodgy presentation – it might look flash, but if you can't read the control surface then things get a tad irritating. Still, presentation is a matter of opinion.

Essentially, to use DUY Shape there are two steps. The first is to choose the cut-off frequencies of the filters. These filters split the audible range into three bands, with no audible degradation. These bands are best chosen according to the frequency content of the track to be processed. The second step is to create the three shapes – one per band – that best suit the selected programme material.

Introducing the

Really Nice Compressor

The RNC is a superb stereo compressor at an unbelievable price. With performance and sonic quality matching even the most expensive heavyweight professional models.

"A debut product that is not only great, but oozes personality - stonkingly great performance, believe me its the best £199 you will ever spend. I wouldn't be surprised if many studios of all sizes will soon possess at least one of these little grey wonders"
Steve Evans, The Mix

"This compressor came as a major surprise - it's musical and controlled, without relying on tubes, optoisolators, or other 'magic' components. As a result, there's also a clarity often missing with vintage compressors, which sometimes thicken the sound. At this price you can't go wrong. If the RNC were a car, it would take corners at 120mph, get 50 miles per gallon, and if you slammed into a wall, it would bounce off harmlessly - this box is awesome"
Craig Anderton, EQ Magazine

Available from the following stocking dealers:
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Eddie Moors Music - Bournemouth 01202 395135
M Corporation - Nottingham 0115 947 4070, Ringwood 01425 470007
Sound Control Direct - 0800 525260

FMR Audio
www.fmraudio.com

UK Distributor: Tel: 01908 510123 Email: fmr@audioagency.co.uk
audioagency

To create a curve, just click and drag its points to the desired parts of the grid. Clicking an existing point while holding the 'option' key will erase that point. As a point is moved, a box with co-ordinates in dB of input verses output also changes for more accurate level setting. The great thing here is that these changes to the audio can be heard in real-time, so there's no need to have to undo an edit. You can also preview, compare and tweak as desired, until the right effect is achieved.

General operation is straightforward, and there are limitless ways of applying this tool – for example, you can compress the low band while leaving the mid and high bands untouched, or eliminate entire bands by using a 'zero shape' function. Simply draw in the shape you require for a certain frequency, using the graphs that take up the main part of the control panel, or use the presets to get yourself started. Plasma-style meters show the levels of each band's content, and here our advice would be to take your time over this, and be very aware of over-cooking things, as it were.

DUY Wide

DUY Wide is a stereo and multi-channel spatial enhancer, and the layout is far more straightforward than the other plug-ins. Input, frequency boost and amount controls allow for intuitive operation – set the input level and click the boost switch, then by pulling the amount fader up you gradually hear the stereo image get wider and wider.

This plug-in works to great effect – so much so that you have to discipline yourself not to overdo it. The boost control section allows the user to pinpoint a particular frequency at which stereo spatialising will take place. However, DUY highly recommend setting the width of the new image first and then sweeping through the frequencies so you that can really determine the optimum frequency at which a given spatial setting works.

Sweet and controlled reverbs can be achieved with Z-Room – providing you can read the controls

We used this on a mix, and the results were astonishing – generally the mix was fine, but when using Wide to sweeten up things you really feel a fantastic sense of panorama from the plug-in.

Although it might seem apt to employ this on a final stereo mix, it's also a viable tool when used on, say, multi-channel vocals or guitar tracks within a final stereo mix, especially when sounds are getting somewhat cluttered.

It doesn't even necessarily produce any mad effects, unless taken to extremes with the boost and frequency controls. It's like DaD Valve – an easy plug-in to get to grips with, but, again, well worth spending some time with if you're after subtle but effective results.

Z-Room

The Z-Room plug-in could be described as just another reverb plug-in, and you might well ask what it can do for you that other reverbs can't. Well, for a start, this reverb plug-in is a little more complex.

The interface is large, and, again, some of the smaller buttons get swamped by the overuse of shadow effects. This does become a chore, especially on a control area with this amount of detail. This main panel is divided into sub-areas: Input, Diffusion, Colour Control, Early Reflections, Mass Control and Mixer, plus the normal input and output meters, which, again, are plasma-style.

'Complex' is the definitive word here. Since DUY have incorporated a lot of new terminology with this plug-in, some users might get baffled. The best way around this, as with all things, is to experiment, and you very quickly find the control areas that make your reverb sound sweet.

The diffusion controls are very expressive, giving smooth, long, open reverbs that disperse beautifully into the air. Alternatively, by using the Early Reflections control area, you can put your new reverb creation into a selection of different rooms by using a small drop-down menu. Better still, if you think the Hall effect is a little long, then simply use the Stretch parameter to control the size of the effect with great accuracy.

Control of frequency response within a given reverb can also be dealt with in detail, using the very rainbow-coloured Low, Mid and Hi Gain colour controls. These are very useful, and just make that final effect sound somewhat different – especially if used to extremes.

When you're finished tweaking the final reverb, the Mixer controls can be used to round things off. This section provides three independent sliders to set up your final effect output. The Direct Gain, Early Gain and Reverb Gain can all have independent values.

All in all, this a very comprehensive production tool – the results are blisteringly good. And with time and patience, you will greatly benefit from the in-depth control surface.

Max DUY

Last, but not least, in this everlasting series of plug-ins comes Max DUY. Here's one for any of you who fancy having a crack at some mastering. DUY claim that it's a revolutionary level maximiser using their Intelligent Level Optimization algorithm – the terminology could make the user think it sounds complicated, but, in reality, it isn't actually a very complex tool to use.

Basically, it's not a compressor/limiter that changes the perceived sound – it increases the perceived sound, but leaves out any of the character-changing effects that come with compression/limiting. Adjustment is straightforward: set the Input, Max dB and Output sliders to 0dB.

Slowly move the Max slider to the left, until you get the desired output level reading. The more you turn Max to the left, the more the maximising effect. More maximising means a greater perceived level increase for a given peak reading. The problem here is that there's always a danger of overdoing it, and if you do, distortion is possible.

Unlike, say, TCMaster X, which uses a peak stop limiter to rule out any hope of overloading a digital signal, this doesn't do that – well, not to the level that would be considered by some to be completely safe. That said, the results are very good and you will definitely find uses for Max if you have it. Perceived sound levels can be greatly increased, depending on the input signal level.

Verdict

Having looked at these plug-ins, it's clear that the name EverPack was consciously chosen over the ever-popular generic 'bundle' terminology because any new user will be doing one of two things: firstly, playing with them forever, or, secondly, forever trying to work out how to use them! This is really the only area of criticism.

They are, in places, very complex tools – especially Z-Room and Shape. The hard-to-read buttons in some areas of the control surfaces make for slower progress than some of the competition. Many familiar terms for parameters have been changed, meaning a trip to manual-land is needed on occasion, but, if you can swallow all that, then the results are really stunning.

The winner of the bunch has got to be Valve – quite frankly, you should just stick this plug-in on every channel you use. Warmth and versatility are in abundance, and, next to Max, it's one of the easier plug-ins to get your head around.

Z-Room isn't far behind, but be prepared to spend a long time fiddling to get results that really hit you as being beyond the norm for a reverb unit.

Shape and Wide would be a fine addition to any mastering engineer's assault package – EQ control beyond your wildest dreams and stereo-imaging that will make you move your monitors further apart to experience the full glory.

Max is there as the finishing tool, and it does exactly what it says – no further explanation required.

So, overall, DUY's EverPack represents a great set of plug-ins that give fantastic results – and all at a reasonable price, too.

More from: Unity Audio, Elms Barn, Baythorne End, Halstead, Essex CO9 4AB
Tel: 01440 785 843 Web: www.unityaudio.co.uk

system requirements

RTAS
- Pro Tools 5 or higher

Audiosuite
- Pro Tools 4.2 or higher

MOTU audio system
- Digital Performer 2.6 or higher

VST
- Cubase 4.0 or higher
- Logic 3.5 or higher

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Eddie Moore Music - Bournemouth 01202 395135. **M Corporation** - Nottingham 0115 947 4070, Ringwood 01425 470007
Sound Control - Leeds 0113 242 6601. **KGM Sound Control** - Wakefield 01924 371766. **MEC** - Guildford 01483 456888
Blue Systems - Ashdon 01799 584095. **Stirling-Syco** - London 0207 624 6000

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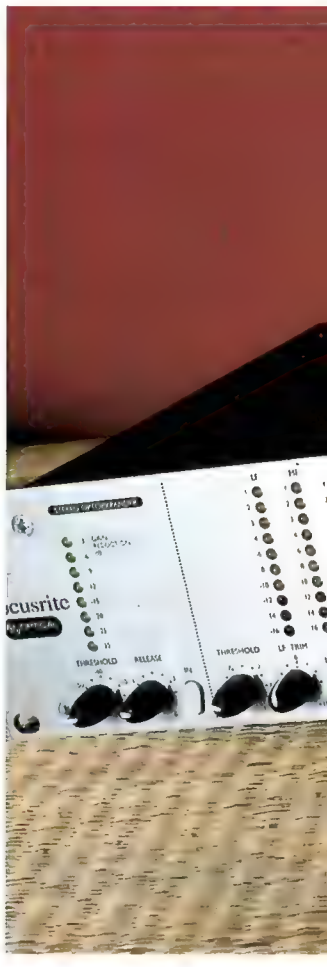
Focusrite Platinum MixMaster

Analogue mastering processor

Price £749 › Optional digital output £149
For Quality sound › Quick and painless user interface
› Powerful combination of functions
Against Digital board is optional rather than standard
Verdict A very well-equipped mix-polishing tool with hands-on functionality



Mastering a mix – giving it that final polish before it makes its way out into the real world of CD, vinyl, the internet and radio – has traditionally been the preserve of the professional mastering suite with its experienced engineers, highest quality monitoring and racks of esoteric compression and EQ. And for the majority of commercial releases that still remains the way to go.

For many home and project studios, however, the DIY ethic now extends, in many cases, all the way through to the mastering stage, courtesy of the new breed of affordable, all-in-one mastering processors that has appeared in the last couple of years.

TC Electronic got the ball rolling, and have been very successful with their Finalizer models, which have been joined the likes of the Drawmer Masterflow and dbx Quantum – digital machines all – but now along comes a new contender with a more traditional analogue approach.

The MixMaster is the fourth unit in Focusrite's affordable Platinum series, and offers all the elements needed to put that final sheen on a mix. Intended to sit between a desk's outputs and the inputs of, say, a DAT machine, this stereo unit sports an expander, spectral compressor, 3-band EQ, and a stereo width enhancer, tailed by a brick wall limiter – all in a 2U rackmounted box. And it sells for less than a grand.

Overview

Being fitted with (+4dBu) XLR inputs and outputs, as well as balanced jacks operating at -10dBV, the MixMaster is equipped to deal with both pro and semi-pro connection contingencies. The only other rear panel connectors are a pair of jacks for direct input of signals at a point in the signal chain: post-processing, but pre-limiter. There is, however, also a huge blanking panel for the optional installation of a digital output stage – see *The Digital Option* box on page 44.

The MixMaster's front panel appearance will come as no surprise to anyone familiar with the Platinum series. The pointy black rubber knobs with the white line and the small backlit buttons are all present, but much of the front panel is taken up with a series of LED ladders keeping the user exceptionally well-informed about exactly what is going on.

Each of the four processing functions has its own delineated section and a switch to bring it into the signal path. There's also a master 'effect bypass' switch for instant A/B checks of the overall processing.

The first section houses the expander, which is intended to top and tail a mix by eliminating any unwanted background noise before the start of a track and after its end. The expander's action is controlled by a threshold knob, variable between -30 and -60dB. These unusually low settings allow it to work right down to the noise floor.

Release time is continuously variable, between 0.5 and six seconds, and the amount of gain reduction is displayed on an 8-segment LED bargraph.

The MixMaster's compressor is a multiband design, which splits the signal into three frequency bands, with each band being compressed separately, so that any large amounts of energy in one particular band have no adverse effect on the other bands.

Each of the bands has a 10-segment LED ladder, indicating the amount of gain reduction for that particular band. Overall amount of compression is controlled by a rotary threshold knob, and six suitably low compression ratios, ranging from 1.3:1 up to 5:1.

A fast attack time is fixed, but a slower attack can be switched in, allowing the compressor to ignore short transients and respond more effectively to the average loudness of the signal. The release times available are a little more flexible – there are six options, including two that are program-dependent, one fast, and one slow, responding automatically to the dynamics of the signal.

Returning to the three separate frequency bands, it's possible to change the balance of the mix by adjusting the relative compression levels of the high and low frequency bands in relation to the mid band. To this end, both the high and low bands have their own rotary trim controls, allowing up to 10dB of cut or boost

CD info

track 06
Hear the MixMaster beef up a dance track with some randomly applied EQ, compression and spacial enhancement

words **Trevor Curwen** images **Gavin Roberts**

specifications

I/O
XLR (+4dBu), balanced
1/4" jacks (-10dBv)

Expander
Threshold: -60dB to -30dB
Release time: 0.5s to 6.0s

Compressor
3-band, crossover points 100, 200Hz, 3kHz
Ratio: 1.3:1 to 5:1

Stereo EQ
High/low shelving: stepped frequency
Midrange parametric: 100Hz to 10kHz
Q: 0.4 to 1.5
Cut/boost: 10dB

Spatial enhancer
L/R trim 3dB

Multiband limiter
Fixed threshold

Frequency response
5Hz to 200kHz (+0/-2dB)

Dimensions
480 x 88 x 265mm

Weight
5.2kg

Digital output
Optional

in the gain for the band. An adjacent 'lock' switch disables the trim controls and sums the thresholds of all three bands to give even compression across the whole frequency range.

The crossover frequency point between the low and mid bands is normally at 200Hz, but this can be changed to 100Hz by a slope switch. This also introduces a presence peak at a little under 100Hz, giving a perceived boost to the low end. The compressor section is completed by a make-up gain knob, providing up to 15dB if needed, coupled to a red overload LED to indicate when the signal leaving the compressor section is too hot.

Equalisation is an essential mastering tool, when a bit of subtle tonal shaping incorporating gentle boosts or cuts are desired. To fulfil this function, the MixMaster has stepped frequency shelving high and low bands, and a parametric mid band.

Up to 10dB of cut or boost is available in five steps for the low band at selectable roll-off frequencies of 40, 70 or 120Hz. Alternatively, the 'tilt' setting gives a more subtle approach, with a 2dB-per-octave slope covering a broad band of low frequencies.

A similar amount of control is available at the high end of the spectrum, with the 10dB cut or boost applied at either 10, 14 or 20kHz. A tilt setting for general brightness is likewise available.

The mid frequency control is fully parametric, with a centre frequency continuously variable between 100Hz and 1kHz, although a 'x10' switch gives the added flexibility of swapping this for a 1kHz to 10kHz range. 10dB of cut or boost is available with the Q factor variable between 0.4 and 1.5.

The final creative mastering stage is the spatial enhancer with its centre-detented width control that uses a sum and difference technique to increase or reduce the apparent width of the stereo image. A balance knob provides 3dB of left/right trim to allow subtle correction of stereo imbalance and works to optimise the effect of the width control. Mono compatibility of any signal can be checked by monitoring the phase coherence of the output, displayed on a 180° meter with a bright blue LED.

The previously mentioned direct input jacks on the rear panel allow a separate external signal to be mixed into the signal path after this spatial enhancer so that a vocal or instrument can be placed in the centre of the stereo field with different processing.

The output can be trimmed with the rotary output trim control, with output indicated by a 16-segment bargraph meter. A multiband limiter, with a fixed threshold matched to the input of the optional digital output, can be switched in at this point if desired. The limiter is designed to operate just before the overload LED at the end of the bargraph meter, preventing overload in subsequently connected equipment.

The digital option

While the small number of self-contained mastering processors available up until now have all been digital units, the MixMaster goes out on a limb by being exclusively analogue.

However, as much of the material mastered through the unit will inevitably end up on digital media (most probably DAT), an integral digital output stage, with high-quality converters, would undoubtedly be an asset to the unit, giving it an added degree of flexibility, and making it more attractive to a larger user group.

Focusrite are well aware of this, recognising that the inclusion of their own converters would give total control over the final signal conversion, and have thus made available a 16-/24 bit, 128 x oversampling digital output board.

Retailing at £149, the board can be bought already fitted when buying a MixMaster or can be retro-fitted by the user at a later date. Fitting is a simple process, involving the removal of a few screws then snapping the digital board's connectors to the main PCB.

The board features the new Crystal Semiconductor 24/96 chipset and has available both an AES/EBU output and an S/PDIF phono output, selected by a switch. Additional switches take care of the selection of either 16- or 24-bit resolution and the sample frequencies of 44.1, 48, 88.2 and 96kHz. A BNC connector provides synchronisation to external wordclock, with a red LED indicating when the unit is correctly locked.

The digital output works simultaneously with the analogue outputs, providing the possibility of simultaneously recording the same mix directly to, say, both 1/2" analogue and DAT.

Adjusting the 3-band compressor is very intuitive – turn the knobs and watch those LED ladders

In use

First use for the MixMaster centred on a selection of DATs recorded at different times in different studios that had never had overall mix compression or EQ applied to them – the object of the exercise being to compile a CD of the best tracks and get them sounding consistent with each other. The unit was also used at the end of the chain when mixing a brand new track, and when recording some stereo sounds.

The most obviously apparent trait is that the MixMaster is intuitive – the instant gratification of one-knob-per-function, and having every function instantly available on the front panel, holds more appeal than the more menu-driven, digital approach. Tweaks can be quickly dialled in and auditioned against the unprocessed signal with ease.

Looking at the individual processes in turn, the expander is effective and unobtrusive in its operation, and cleaned up some noisy open channels and reverb returns that were creating a nuisance at the start of some of the tracks with a minimum of setting up.

The compressor provides a very gentle smoothing of the signal, as required, but is capable of adding some real power and punch to mixes. Multiband compression that's this easy to set up (by merely using two knobs to adjust the high and low bands in relation to the mid) is a supremely powerful tool, with great scope for shaping the overall form of a track.

Listening closely, and adjusting the relative compression of the bands, a couple of lacklustre mixes were transformed into something altogether more promising, the three LED ladders of the separate bands leaving no doubt as to what processing was going on.

Setting up a crisp top end and a nice fat, yet controlled, bottom end is quickly achieved, and for particular emphasis, the well thought-out slope switch extends the amount of control over crucial low end frequencies, greatly increasing versatility. The release knob plays a large part in increasing the perceived energy in a track with some of the shorter time settings and the PDF (Program Dependent Fast) setting assisting in getting some rhythmic dance mixes really pounding away. The MixMaster EQ section proves itself to be versatile, while sounding very musical. The mid range parametric band gives plenty of tonal shaping power, while the lifts and dips available with the other two bands are ideal sweeteners.

Doubtless there will be some users who find the spatial enhancer a viable tool – it's the aural equivalent of a panoramic camera or wide screen TV in that it can open out a mix on a grander scale. Auditioned on a variety of tracks, the results were always interesting, but at extreme width settings the effect on some tracks was quite horrible. Used in moderation, however, the stereo width adjustment can provide that useful final tweak for getting a track to sound just right.

The review model came without the digital option, so there was no opportunity to test that in conjunction with the limiter. When using the analogue outputs, however, the limiter's operation is sensibly accurate and, once the output gain is trimmed, the signal is kept nicely in check.

Overall, it is very difficult to fault the MixMaster; it does an equally impressive job whether strapped across a whole stereo mix or processing stereo sounds while tracking.

Verdict

The MixMaster may not have all of the tweaking options available in the established digital units, and it certainly doesn't have the presets and user memories, but its one-knob-per-function simplicity of operation and ample signal metering give it a user-friendly nature that many will find appealing.

The unit scores highly on sound quality, the signal path is clean, and all the functions have a carefully-chosen range of parameters that will be beneficial to anyone wanting to add that final polish to a mix.

Even with the added cost of the digital board, the asking price remains a reasonable amount for the facilities on offer, making this a machine that will find itself permanently plumbed across the main outputs of many a mixing desk.

More from: Focusrite Audio Engineering, 19 Lincoln Road, Cressex Business Park, High Wycombe, Buckinghamshire HP12 3FX
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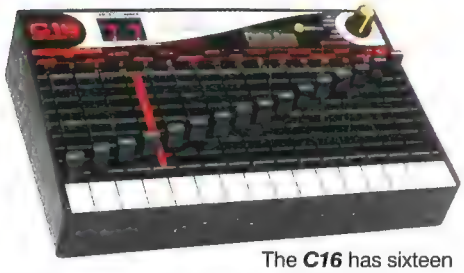
Multi-preset hardware MIDI control unit

You may have a struggle accessing the powerful features of your high-tech music gear, because of limited or difficult user interfaces. The new *Philip Rees* ***C16 MIDI Control Unit*** could help you get to grips with the hidden potential of your equipment.



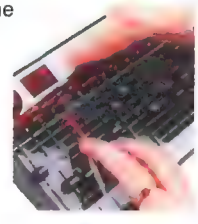
The ***C16*** has sixteen 60 mm slider controls. The sliders may be assigned to a variety of MIDI control functions.

The assignments are held as one hundred built-in *Target* presets. As the ***C16*** is a preset device you avoid the brain-ache of having to program it yourself, and you can quickly get stuck in to using it creatively. The large number of target presets means that is ready, out of the box, to do most of the jobs that you are likely to want it to do.

Typical examples of control functions provided include filter cut-off, envelopes, LFO and pan.

The *Target* presets include *GM*, *XG*, *GS*, *AWE* and many popular synths including *JV-1080*, *Korg X-series*, *Matrix 1000*, *Proteus* and *Orbit*. The ***C16*** can generate all MIDI controllers and can control any MIDI slave where controller numbers are assignable. It also supports many control functions which require MIDI System Exclusive messages.

It is easy to recall one of the *Target* presets. First, you look up its number. Then, holding down the TARGET SELECT pushbutton, you move sliders 4 and 5 until the two-digit LED display shows the correct target number.



The ***C16*** has one MIDI IN and one OUT/THRU port with automatic merging. If you ever need new slider assignments, you can program two of the *Target* memories using MIDI *System Exclusive* messages–see our website for details.

The dimensions are 210mm x 135mm x 55mm, so it doesn't waste valuable work space. There is a built-in mains power supply.

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Roland VS-1880

24-bit digital studio workstation

Price £2,199 (including effects card and internal drive)
For Awesome audio performance ⊙ Decent-sized backlit screen ⊙ Ample connections
Against No dedicated EQ controls ⊙ No pan pots
⊙ Can only import VS-880 songs from a Zip disk (officially)
Verdict A serious recording option for those wanting a compact, reliable and portable workstation

Since the advent of the portable digital multitracker, things have moved on at an incredible pace – we've become accustomed to their once incredible performance, and now we expect more and more for little or no increase in price.

Roland's original VS-880 led the way by introducing effects, automated mixing and CD-R backup. And now we're all waiting to be impressed even more. The last 12 months have seen some interesting new additions to the desktop HDR market, but the VS-880 has never really been superseded in terms of features – until you start to look at its bigger brother, the VS-1680.

So, the back end of this year looks like it's going to feature a scrap between the three big products in this field. Yamaha are wading straight in with their much-awaited AW4416, which looks set to do well, descended as it is from 02R stock; Akai have their DPS16, and Roland are hitting back with the latest in the VS range, the VS-1880.

Featuring two additional tracks over and above its 16-track counterparts, the Roland has the advantage of a wealth of experience from the company's previous models. That said, it's looking distinctly like it's going to be a close-run race.

Overview

Apart from the new black and dark grey casing, the VS-1880 looks similar to the 1680. It's very solidly built, yet easily transportable, and features 24-bit performance with 18 tracks to play with. As with the other VS recorders, the 1880 has virtual tracks for multiple takes, or for bouncing down to.

This time there's a total of 288 tracks, arranged into 18 groups of 16 V-tracks. By any standards, that's a lot of flexibility. As with the 1680, only eight tracks can be recorded simultaneously, but this doesn't seem to put many people off.

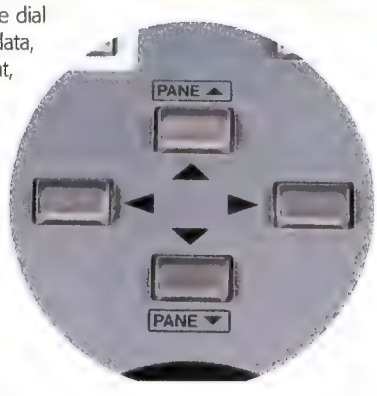
As is usual, the back of the VS houses the connections to the outside world. These include eight analogue ins (two of which are on balanced XLRs with phantom power), digital ins and outs on both coaxial and optical, a hi-z guitar input, two aux sends, monitor out, master out, a footswitch, headphones, SCSI II and the usual MIDI in and out.

The master outs, monitor outs and aux sends can also be configured to act as eight individual outputs, a feature also seen on the 1680 and VSR-880. Each VS-1880 comes with a 12Gb drive as standard that's capable of recording over 80 hours of audio in 24-bit MTP mode at 44.1kHz – very nice.

The control surface is one of the big plus points of the 1880 – everything is easy to find and very clear. The transport/editing section underneath the screen is kept away from the mixer section on the left. The chunky transport controls make a welcome break from the rubberised ones found on some other machines.

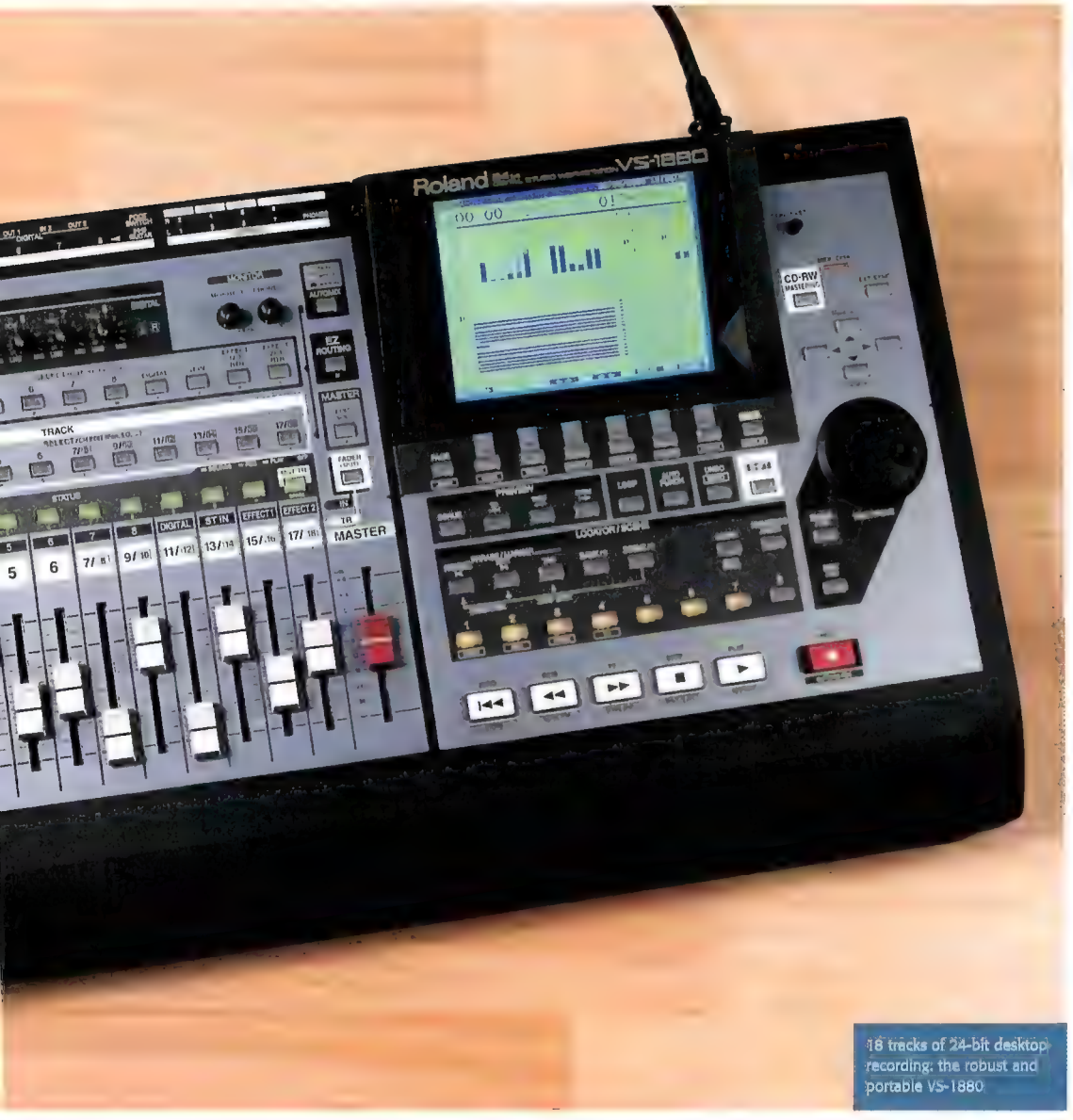
As opposed to Roland's V-Mixers, the large dial on the far right of the unit *is* used to enter data, or shuttle around when editing. Not only that, but the function keys under the screen really do line up with their onscreen descriptions – wonders will never cease!

As with the 1680, there isn't a dedicated fader for each track – tracks 7 to 18 are arranged in pairs, so there are only 13 faders including the master. The first eight channels of the mixer have gain controls assigned to the input jacks on the rear panel, but, unfortunately, none of the channels have pan pots. These were first omitted on the 1680, and it's a real shame, because it's one of the things you really need quick access to when mixing. The mixer itself has 28 channels, giving 18 for playback and 10 input channels.



Cursing made easy
The VS-1880's handy four-way cursor keys make editing a doddle, especially when combined with the data wheel

words **Sean Vincent** images **Gavin Roberts**



18 tracks of 24-bit desktop recording: the robust and portable VS-1880

The Zip question

If you've been using a VS-880 for last few years, and – as I did – bought Roland's S2 CD-R writer to backup all your song data, then you're going to be disappointed to learn that the VS-1880 can only import 880 data from a Zip disk. Now, it would make sense that a fair proportion of potential 1880 purchasers are current VS-880 owners looking for a familiar and compatible upgrade path. Not being able to import all your stored data from an official Roland backup device seems ludicrous.

Well, worry not. During the process of this review I decided to try the following solution for myself: just as Roland said, the imported file from CD-R wouldn't play. But if, once you've loaded the 880 file and imported it, you power down the VS, remove the SCSI connection to the CD-R drive and then reboot, the file will play as normal.

Don't ask why it works, but it does. Roland are looking into this, and hopefully a software update will do away with the need for powering down. It's worth mentioning that Roland now make a new VS CD-R writer which writes at 4x speed, so it's certainly worth checking that out for both backup and audio writing duties.

The 1880 comes with one VS8F-2 effects card as standard, but there's also room for a second card, should you need it.

Channel view

The channel view page is similar to that of the V-Mixers or Yamaha's 02R, and from here it's possible to navigate around the screen to adjust all the relevant parameters. This is another area where the 1880 scores well, as everything is easy to find, and the combination of cursor keys and data wheel make editing parameters simplicity itself.

The main channel view screen shows level, panning, attenuation and FX send levels for either the two optional internal effects or the two external effects busses. There's also a phase reverse switch, grouping, solo and mute, as well as a track status indicator and a v-track selector.

The function keys allow you to jump quickly to either the pan, EQ, or v-track selection, or an overall view of what each track is doing with any particular function. This really helps speed things up and almost makes up for the lack of dedicated hardware controllers for the EQ and pan.

Main play screen

There are four options for the main play screen, where all the audio activity for each track can be simultaneously seen. Using a scrolling graphic display, it's easy to see where you have recorded audio, and which tracks are active or about to start playing – very handy for mixing; you'll never forget that 'one-off' fill on track 18 that might have previously hit you unawares.

Two of the screen options allow a brief description of the track, as well as basic information like scene numbers, locate banks and sync info. The function keys can be used to zoom in – for a better overall view – or out – for a more detailed view. And for editing, there's even an option to look at the wave of any particular track.

specifications

Tracks
18 (28 including live inputs)

V-tracks
288 (16 v-tracks per track)

Simultaneous track recording
8

Maximum useful capacity
128Gb (2Gb x 8 partitions x 8 drives)

Memory
200 songs for each device (1880, 1680, 880, 880EX, VSR-880)
Total songs limited to 500

EQ
18 channels with 3-band EQ
28 channels with 2-band EQ

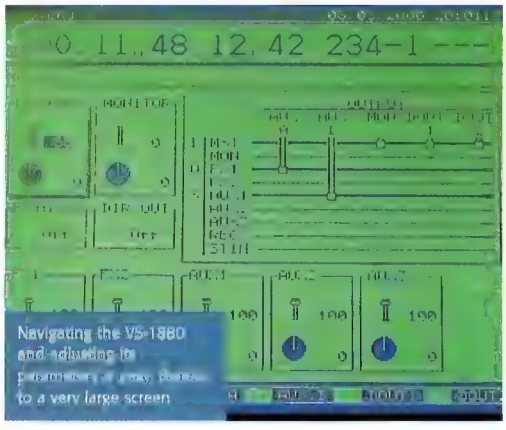
Recording modes
MTP (multitrack pro)
CDR (CD writing)
MAS (mastering)
MT1 (Multi 1)
MT2 (Multi 2)
LIV (Live 1)
LV2 (Live 2)

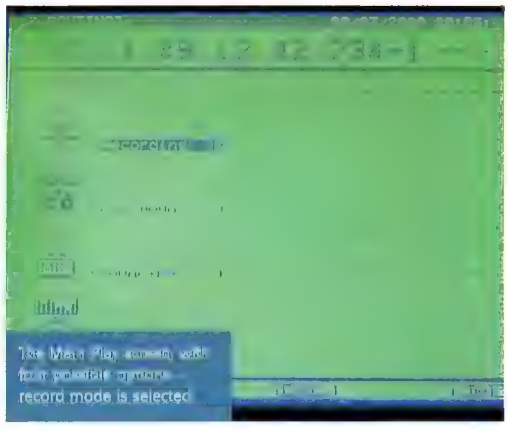
Conversion
A-D 24-bit, 64x oversampling
D-A 24-bit, 128x oversampling

Sample rates
48, 44.1, 32kHz

Dimensions
554 x 336 x 109mm (WHD)

Weight
6.3kg


Navigating the VS-1880 and adjusting its ... to a very large screen


... record mode is selected

In use

As on some of the other VS models, the 1880 features EZ routing, providing four basic templates for using the VS in either recording, mixing, bouncing or mastering modes. This takes a lot of work out of setting up, making preparations for a session much quicker.

As well as the templates provided, the 1880 can be set up as you wish using the parameters provided within the EZ routing page. Basically, setting up for a session needn't involve too much button pressing and menu staring.

Another feature that has been seen on previous models is the song optimise option that removes and deletes any audio from a song that isn't needed. With HDRs, every time a take is performed, then 'rewound' for another take, the previous takes are always kept, even if they're not saved. This clogs up your drive space, so the optimise function gets rid of them, which can really free up some much-needed disk space.

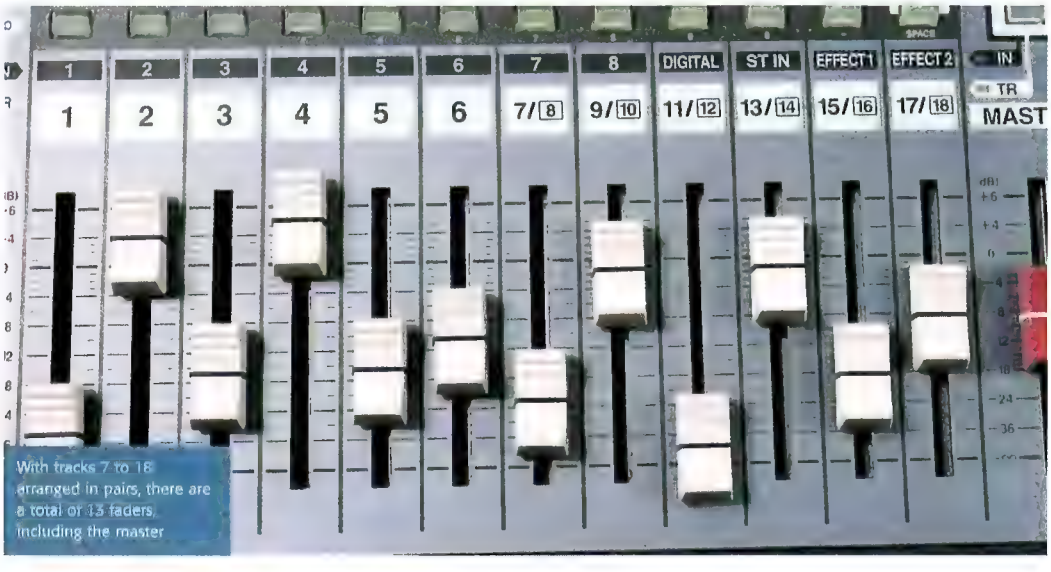
An addition to the VS-1880 is the CD-RW Mastering button, and it's from here that all the CD-R functions are selected, should you have one. As well as the standard write, store and recover, there's also a Mastering Room option.

As seen on the VSR-880, this sets the VS up in mastering mode, meaning that tracks 17 and 18 are put into record-ready, and all other tracks are routed to 17 and 18 for a stereo mix. The VS8F-2 effects card also gives access to the mastering effects, including multiband compression for getting that all-important decent level to disk.

An option that will be welcome to existing VS owners is the ability to save the image file when compiling an audio CD. Previous models didn't allow this, so every time you made a CD, you lost the image file on power-down. This has always been a bone of contention with the VS CD-R option, but now, thankfully, it's been sorted out. Nice one, Roland!

When an image file is created in the burning process, it's temporarily stored on the internal IDE drive, but is then transferred to CD-R when the song is backed up. This image file will then always be attached to the song file for ease of use.

As on the other VS recorders, there's lots of scope for sync'ing to or from external devices, and a nice feature of the manual is the inclusion of a few pages dedicated to setting up the 1880 alongside the more popular sequencing packages – such 'cross-pollination' between manufacturers is not exactly commonplace. After all, a lot of people would still rather sync something like a VS to their software sequencer rather than trust their audio to a temperamental PC.



With tracks 7 to 18 arranged in pairs, there are a total of 13 faders, including the master

Ample connections: coaxial and optical ins and outs, to name but four

The Automix feature now has its own dedicated key on the control surface and is very simple to set up. Having complete control over your mix is as simple as pressing the key to arm the tracks you wish to automate, then hitting record. Using the Micro Edit function, the Automix information can be edited in much the same way as one would using a list editor on a sequencer.

As well as the real-time automation, snapshot and gradation is also to hand. Snapshot speaks for itself, while gradation cunningly morphs the information from one snapshot into another.

As with the VS-1680, editing is easy – it might not be as straightforward as a computer-based system, but you soon get used to it. All that's needed is to select start and end points, and to and from points. Moving, copying, erasing and inserting soon become second-nature, and you find yourself listening, rather than looking at the screen, which is always a good thing.

As usual with VS8F-2 effects cards, all the effects are excellent, and the compressors, gates and EQ are more than capable of producing professional results. For those looking for a really integrated system, the Roland DS-90A monitors will connect digitally to the VS-1880, enabling use of the speaker modelling patches found on the VS8F-2 card.

Generally speaking, the VS-1880 is very easy to use, and, with little or no reference to the manual, most people with a basic knowledge of recording will be able to get to grips with the 1880. One of the three manuals is a user's guide, which explains simply and concisely how to go about using the VS-1880. And only when you need the advanced features will you need to dive into the other manuals. Not once in our experience of the VS range has one of these machines ever crashed or lost any data that it shouldn't have. There's certainly a lot to be said for that!

Verdict

In general, the VS-1880 is a very reliable and professional piece of kit that will serve you well for both recording, mixing and mastering of your tracks. The effects are excellent, the control surface is very good, the screen is great and its overall feel is very conducive to work.

The main problem for the VS-1880 comes in the form of competition. Yamaha's imminent AW4416 features onboard sampling and sequencing, as well as the revered 02R pedigree, for a few hundred quid more.

But perhaps the most imposing threat predictably comes from the current crop of software recording packages. Digi 001, Logic and Cubase all outweigh the 1880 in both functions and expandability – albeit with the hassle of buying a reliable soundcard and host PC or Macintosh computer.

The market for the VS-1880 would, therefore, seem to be the engineer on the move, or anyone not wanting a studio full of cables and/or computers. Add a mic and a set of monitors, and you're ready to record within seconds of powering-up – there's a lot to be said for that in this age of endless booting-up and formatting tapes.

Whether the VS-1880 will be the new king of the desktop HDR market remains to be seen. It's not going to have the impact that the 880 had, but then this isn't 1996, and, as mentioned at the start of this review, we've all come to expect a lot more from such products these days – more than 24-bit recording over 288 tracks, a huge backlit screen, balanced XLR inputs and CD-R backup. Are we getting greedy?

More from: Roland (UK) Ltd, Atlantic Close, Swansea Enterprise Park, Swansea, West Glamorgan SA7 9FJ Tel: 01792 702701 Web: www.roland.co.uk

The editing controls are thoughtfully isolated from the mixer

Studios in a box

Back in the mid-'90s, Fostex launched the DMT8, which created quite an impression. The first portable hard disk recorder with a built-in mixer, it meant that anyone could now have a digital studio at home.

Roland took things further in 1996 with the launch of the VS-880, featuring 64 virtual tracks, optional internal effects, automated mixing and MIDI control – all for the kind of money you'd normally spend on a half-decent synth. Over the last four years we've seen all sorts of contenders in this market. Even MiniDisc portastudios tried their luck, but the real market leaders were complete solutions in one box – Roland's VS range, Akai's DPS12, and not forgetting Korg's D8 and D16.

Their appeal lies with three main types of recordist: people who don't have an entire room to dedicate to a studio, those attracted to their portability, and those who can't afford (or justify) the cost of buying separate components to build a studio. And let's face it, the cost of setting up a studio to the specifications of the VS-1880 using a modular HDR system, digital mixer and a similar selection of effects and processors can easily run to the wrong side of £5,000!

There are pros and cons to buying a 'studio-in-a-box' at the moment. On the one hand, you've got a physical piece of equipment that will have a resale value in five years – unlike a software-based system. On the other, you're stuck with a relatively non-expandable system – albeit a pretty good one.

Our advice would be to watch the market closely when you buy one of these, and as soon as it's about to be seriously superseded then get ready to sell up – or watch the second-hand value plummet. Obviously, you never have to upgrade if your system works for you. Many fine recordings are still being made on analogue tape, y'know

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Against At this price... nothing!

Verdict Get the sound of classic 'stomp boxes' with these cool-looking plug-ins

words **Sean Vincent**

Everybody loves the immediacy of stomp-boxes, and for many of us these guitar pedals represent our first experience of audio effects. Since the advent of multi-effects boxes, we've been constantly trying to recreate the lo-fi sound of pedals.

It's become a real fad for producers these days to have a collection of cool pedals, ready to patch in at a moment's notice, for that 'dirty' lo-fi edge – everybody's at it from Massive Attack to Madonna. In this age of digital recording and computer-based HDR systems, wouldn't it be great if we could have that sound and immediacy in a digital form? Enter Stomp'n FX Vol.1.

Overview

Packaged in a regular CD jewel case, the Stomp'n FX CD-ROM is nice 'n' easy to install – enter the serial number and you're off. DSound ask you to register online for future updates and support.

Stomp'n FX Vol.1 consists of six individual plug-ins, comprising a graphic EQ, compressor, noise gate, auto-wah, flanger and chorus. Graphically, they look like classic stomp boxes – with all the editable controls where they would be on their hardware counterparts.

Even their colour schemes match the Boss range of pedals for easy identification – not that you're going to have to stare down at these through a cloud of smoke and alcohol-impaired vision. Let's take a closer look.

DS-GE1 graphic equaliser

As with the hardware versions, this is a simple 7-band EQ, with 18dB of cut or boost. Although it can be quite severe in use, the presets make for some easy tweaking of everyday sounds – for example, Brass, Guitar Clean, Guitar Hard, Hi-Cut, Kick or Loudness.

For simple EQ'ing (without having to resort to a 10-band parametric, or whatever you would normally use in your editing software), the DS-GE1 gets the job done quickly and easily. As with all these plug-ins, the pedal part of the front-end acts as a on/off, or bypass switch. The overall output level is controlled by the eighth fader, which saves having to go elsewhere for changes in volume after you've EQ'd something.

Overall, a nice little utility for basic EQ'ing, which will see more and more use as you build up a list of often-used presets.

DS-CM1 compressor

Featuring four rotary 'pots' for control over threshold level, attack, release and ratio, the DS-CM1 works just like every foot pedal compressor you've ever seen. There's also a Mode A or B switch – Mode B increases the gain in accordance with the threshold to compensate for gain loss, whereas Mode A does not.

There are presets for Hard, Hard2, Sustain Comp, Attack Comp and 2:1 (with 12dB of cut). It's very easy to use, and you can hear exactly what you're »

CD info

track 07
The full pack is demo'd here, all put to work on drum loops, bass riffs, synths lines and vocals – stompin'!

track 01
Try out Stomp'n FX for yourself with these PC and Mac software demos. The graphic EQ is fully-working, and free...

DSound's virtual creations look and sound like the real thing – they're even colour co-ordinated to match a well-known pedal range

system requirements

PC:

- Windows 95/98/2000/NT 4.0 or later
- DirectX or VST 2.0-compatible host
- Pentium 100 for real-time processing
- SVGA card with resolution of at least 800x600
- 16Mb RAM
- 5Mb hard disk space

system requirements

Mac:

- OS 7.6.1 or higher
- VST 2.0-compatible audio application
- Minimum: 180MHz 604e CPU with L2 cache
- Recommended: G3
- 32Mb RAM

doing, but this one could really have benefited from some simple metering for gain reduction. Maybe it wouldn't be in keeping with the 'foot pedal' thing, but it would have made it more useful. Even so, this works great on bass and guitar, and even some vocals – if you're careful.

DS-NG1 noise gate

A simple but effective noise gate, with controls for threshold, attack and release. This works well as a basic noise gate for removing hum and background noise when mixing a guitar, bass, or even a synth part.

What we liked best about this one, though, was its effectiveness at chopping up beats and loops, and turning them into stuttered rhythmic loops, which could then be further processed to make new loops. As with many things in the studio, abuse can yield fantastic results. It's a shame there's no key input, but then, when have you ever seen one on a pedal?

DS-AW1 auto-wah

Probably our favourite one of the bunch, this one really emulates the old stomp-box sound. Controls include sensitivity, rate, depth and centre (as in centre frequency). There's also a switch to toggle between Mode A or B – this effectively inverts the sensitivity threshold of the pedal.

Unlike most auto-wahs, this one adds a touch of 'valve-type' distortion to give the sound some character. The presets cover a range of applications from fast guitar-type auto-wah to a band-pass filter, and some careful tweaking results in some awesome 'envelope filter'-type effects that sound great on bass and synth bass patches.

DS-FL1 flanger

If ever there was a stomp-box effect that multi-effect boxes had trouble copying, it was the flanger. The pedals always sounded raw and, to a degree, over-the-top, but the DSound version is spot on. With controls for tune, rate, depth and regeneration, the FL1 works, and sounds, just like a battered old pedal. This is fabulous on guitars and pads, but even better for getting those messed-up vocals.

DS-CH1 chorus

An often under-used effect these days, chorus is always good for fattening up bass lines, or adding some cheesy auto-double tracking-type effects to vocals. Using controls for mix, rate, depth and stereo, the CH1 captures the sound of a basic chorus box very well. The hands-on approach encourages you to use it where you might not have previously bothered. The presets include all the usual slow modulating types, right through to the vibrato kind of effect. A useful and simple effect that's always handy to have.

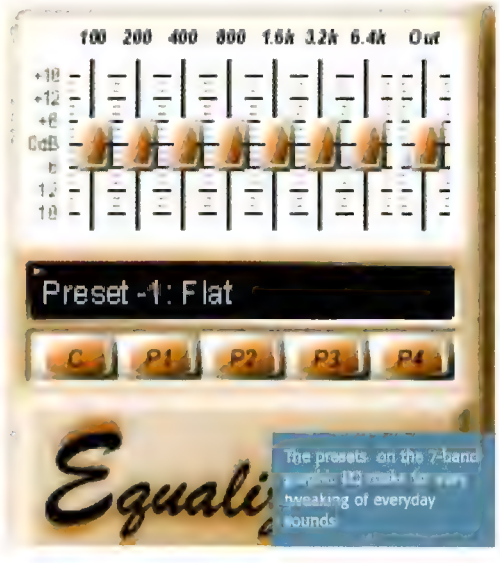
Verdict

As with real stomp-boxes, these plug-ins are simple to use and, more importantly, fun. There are some nice features here, too. The help files are great, and come in the new 'chm' format which looks great, although you can't access them using the help button on the plug-in's surround – clicking on the raised name on the pedal itself brings up the help option.

Also hidden in the options is the ability to use a smaller graphic front-end if your screen is getting cluttered. Clicking on the About Plug-in option from the options menu brings up a 'www' button which, when depressed, takes you straight to their website for support or updates – assuming you have a modem.

Since the arrival of this set of Stomp'n FX, I could easily do away with a lot of other plug-ins from my hard drive, as these simple effects cater for most occasions when all I need is a simple chorus, flanger or EQ, without the need for complicated editing or the eating up of valuable processor power. If you want some more plug-ins for your system, and like the idea of retro-sounding pedals, get this set. You won't be disappointed – not at this price.

More from: Digital Media Ltd, 107 Regents Park Road, Primrose Hill, London NW1 8UR Tel: 020 7586 9556 Web: www.digital-media.co.uk



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Stirling Bundle

PC recording package

Price £999
For Good recording front-end ⊙ Great value
Against Core 2 is a very fussy card ⊙ Not multi-client
Verdict A strong package for the writer's studio

The Stirling Bundle is a complete recording package for the PC. The package is based on the Lexicon Core 2 card with the MP100 daughterboard FX processor (we previously looked at the Lexicon Core 2 card in *The Mix* issue 72), one Marshall MXL2001-P large diaphragm condenser microphone and an SPL Gold Mike dual-channel valve microphone amplifier. On paper, all the components are high-quality, but, as a complete package, do they do the business? Well, that's what we're here to find out...

Lexicon Core 2

First off, we'll take a look at the individual components. The Lexicon Core 2 is an unusual card with some very interesting features, and, although it has been around for about a year now, is still valid as a contemporary device. It comes in the form of a short PCI card with ADAT optical I/O, plus a large D-type connector for accessing the breakout box, which itself features eight analogue outputs, four analogue inputs, plus digital I/O on S/PDIF.

The four analogue inputs are blessed with DBX Type IV compression that is switchable via the use of internal jumpers – not the most elegant of solutions, but, fortunately, the DBX processing is pleasant to work with, and, as a result, remains switched in.

The Core 2 has standard MME Windows drivers and ASIO, but no ASIO 2 drivers, which is unfortunate. But, that said, the Core 2 does have a Punch facility that, when engaged, switches the input signal directly to the output signal for monitoring purposes. This negates the use of small buffers, thus lightening the load on the old CPU, but doesn't allow the use of effects or processing from your sequencer when recording – a small price to pay for accurate monitoring.

Fitted to the PCI board is the MP100 effects board, which is, in essence, an MPX100. In our previous look at the Core 2, the drivers supplied at the time were version 1.21, but this has since developed into version 2.12 that, thankfully, is now supplied, and, therefore, doesn't require a visit to the website.

The Core 2 is still an awkward card to install, however, and the instructions must be followed rigidly. Unlike many cards these days, the Core 2 does not like to share IRQs, so an element of care has to be shown in allocating the correct and unattached IRQ. The Core 2 is also reluctant to share your computer with any other audio devices. We're not saying it won't, but things are certainly easier if you don't!

All Core 2 functions are controlled from the Lex Panel, a series of four windows that access the main functions of the card. The first window deals with the effects routing, and here we are presented with the MP100, where send and return sources for the MP100 board can be selected.

This is followed by the Punch window, where one can select the channels to be allocated direct monitoring. The next window deals with wordclock selection for ADAT, internal or S/PDIF coaxial. The last window is named Core 2, and from here all inputs and outputs are selected.

To the left of this window are four faders to set the input levels for the four analogue inputs. There's little control here, the emphasis being on the use of your Audio/MIDI platform routing to handle the card. Although the Core 2 worked well with Logic, it was far happier working with Cubase VST.

SPL Gold Mike

The next component to look at in the Stirling Bundle is the SPL Gold Mike. SPL have, over the years, developed a reputation for their alternative approach to signal processing, from the early days of their ever-popular Vitalizer through to devices such as the Charisma. So it was with a certain level of expectation that we opened the box to lift out Gold Mike.

The Gold Mike is a dual-channel tube hybrid microphone preamplifier and is – you've guessed it – a rather fetching gold in colour. It's 2U high, and appears to have nothing remotely unusual about it, which is a

specifications

MARSHALL MXL2001-P
Type condenser
Polar pattern cardioid
Diaphragm 25mm gold-sputtered
Frequency response 30Hz to 20kHz ±2dB (estimated)
Sensitivity 15mV/Pa
Impedance 200Ω
S/N ratio 80dB (A-weighted)
Maximum SPL 130dB
Power 48V phantom power

words **Adam Fuest** images **Amanda Thomas**

Stirling Bundle: a quality front-end for PC recording at a bargain price

specifications

SPL GOLD MIKE

Frequency response 10Hz to 100kHz, ±0.5dB

THD 0.175% at 30dB gain

S/N ratio -85.6dBu (A-weighted) @ 30dB gain

Dynamic range 111dBu

Inputs XLR x 2

Outputs XLR x 2, unbalanced jacks x 2

Gain 20 to 72dB

Pad 30dB

HPF 12dB per octave @ 50 Hz

Maximum input level +25dBu

specifications

LEXICON CORE 2

Sampling rates 44.1/48kHz

Bit rate 24-bit

Analogue inputs 4

Analogue outputs 8

Digital I/O S/PDIF (RCA), ADAT

specifications

MP100 DAUGHTERBOARD

Processing 24-bit true-stereo dual-channel

Effects 18

Presets 240

first for SPL. There's no width or warmth button – nothing but the bare essentials, in fact; a definite statement that the Gold Mike is to be taken seriously as an audiophile's tool. From left to right, along the front panel are five switches with corresponding LEDs. The first is for 48V phantom power, followed by a phase-reverse switch.

Next on the agenda is a pad with 30dB gain reduction. This is followed by a high-pass filter set at 50Hz and then… well, there had to be something. And that something is? Flair. If you read the SPL description of Flair, you might raise an eyebrow. One of the key words that raised a smile on our faces was 'Soundprettifier'. The Flair circuit, if you read the prose at the SPL website, is some form of band-pass extraction from the original signal, which is then re-introduced back through the valve circuit. So, without any supplied technical blurb, this is our understanding of the process. Needless to say, it sounds rather like an aural exciter to us, with just a hint of Soundprettifier.

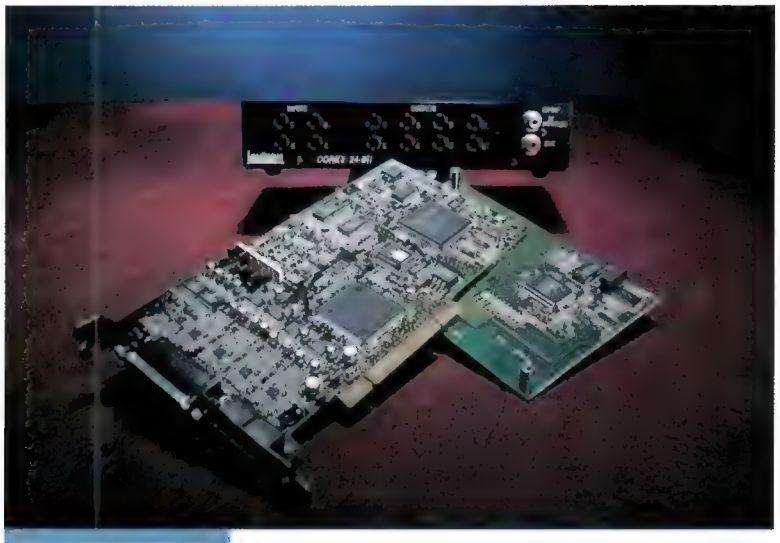
Following this are two large retro-styled knobs, which are connected to rather high-quality ALPS potentiometers, and above this is a very small VU meter. To the right of that is a rather nice little mesh through which the ECC83 valves can be viewed. These controls are then duplicated for the other channel. The last addition to the front panel is an illuminated power switch.

To the rear of the unit reside inputs on XLR and outputs on both XLR and unbalanced 1/4" jacks, plus a ground lift switch. The Gold Mike runs in Class A mode and has a quoted dynamic range of 111dBu, which we had no reason to challenge – in listening tests the Gold Mike sounded great.

With or without Flair, the sound was detailed and engaging, providing a clear and natural performance. With Flair engaged, however, there was a noticeable increase in apparent presence – the effect became a little abrasive after a while and one felt that the Gold Mike performed best when used flat, just as nature intended. Using a nice microphone preamp on acoustic instruments is always a joy, especially when coupled to a quality microphone…

MXL2001-P

And so onto the final ingredient in the package, the Marshall Electronics MXL2001-P. A large-diaphragm condenser microphone, with a real 1" »



Lexicon Core 2: stable and reliable when used as the only soundcard in a system

gold-sputtered diaphragm, built in a much-copied, thick-bodied, German style, reminiscent of a Neumann U87, the MXL is matt black and comes with a rather nice suspension mount.

The spec for this microphone is respectable, as you can see from the box on page 54, but it's not all about how it looks on paper. And, to be honest, the MXL is a real surprise. The supplied frequency plot is relatively flat, showing a small peak at 3kHz, then a gentle rise from 5kHz up to 18kHz and then rolling off. There's an equally gentle roll-off from 100Hz down.

The MXL shows real character, being both rich and charismatic. In a blind test against a U87, an artist recording at the studio was convinced, when listening back to his voice, that he was listening to the U87 as opposed to the MXL. Now this isn't to say the MXL is better or worse than the Neumann classic, but it's certainly a very attractive microphone to use on the male voice.

On female vocals it was also effective, but lacked the articulation of an AKG414 or a Neumann TLM170. Nevertheless, at this price, and as part of the bundle, it represents outstanding value. On acoustic instruments it's generally a very usable tool, although the lack of a pad, selectable polar response or high-pass filter does restrict its use on occasions. But, again, at this price one can't complain, and it certainly rivals the competition from the Antipodes.

Verdict

So, does this package constitute a bargain? The Lexicon Core 2 used as the only soundcard in a system is stable and reliable, but has no 96kHz support. In many ways, it is showing its age, what with ASIO 2 support now appearing on more and more cards. The ridiculous speed that CPUs have achieved negates, to some degree, the need for features, such as direct input switching, that the Core 2 possesses.

The lack of multi-client support and limited software front-end are glaringly obvious when placed against the likes of the Aark24 or the SoundScape Mixtreme. The facilities available in the Core 2 are restricted a little by the drivers and software provided.

The inclusion of the MP100, however, certainly spices up the dish, although the routing and access to this is not as well implemented as, for example, the effects on the Yamaha DS2416 – but they do sound undoubtably better.

The Marshall MXL2001-P, with its great flexibility and well-rounded sound, is an excellent choice for a writer's environment and one would feel perfectly happy to have several of these little beauties tucked away in the mike cupboard.

The Gold Mike, with its purist bias and effortless delivery together, with the MXL2001-P provides a great front end for your recordings. In many ways, this is a great deal, and for the money it is a bargain. But the question here is, 'Can you live with the Core 2?' If you can, then this package is for you.

More from: Pure Distribution, Stirling House, Kimberley Road, London NW6 7SF Tel: 020 7372 6330 Web: www.pure-distribution.com

system requirements

- Windows 95 upwards
- 200MHz Pentium minimum
- 64Mb RAM
- Fast EIDE or SCSI hard disk

SPL's dual-channel tube hybrid preamp: the detailed and engaging Gold Mike

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new releases

MIKA
MIKA
(KLEIN)

According to their manifesto, Mika, a newish German duo backed by five teenage friends, usually deliver 'effervescent pop house bliss bombs', but on this eponymous offering have instead opted to give us a far more hypnotic bill of goods. Once you've heard the first 90 seconds of any given track you seem to have clocked it all, but that, on the other hand, is surely part of the appeal – you don't mesmerise people with jarring deviations and screaming dead-ends. Vocoders and ageing analogue synths – or are they cunningly-used plug-ins? – get to strut their stuff a lot, and the wistfully happy mood of cuts like 'Tomorrow' and 'Enthusiastic' are the best examples of this. It sounds like they had fun recording this, which is, I suppose, an achievement in itself, as well as being a general 'good thing' since such vibes often trickle over into the audience's consciousness. Pleasant. • *Phil Strongman*

Producer: Mika **Studio:** Playmobilzimmer, T-on Studios **Verdict:** Mellow Mitteleuropa... 6/10

DOPE SMUGGLAZ
DOPE RADIO
(PERFECTO)

Of course, if they were really dope smugglaz Keith Binner and Tim Sheridan would have called themselves something like 'Respectable Looking Family' or 'The Nuns'! Or is it a double-bluff? Anyway, look beyond the tired old 'tuning-through-the-wavebands' radio conceit and yet *more* synthesized vocals – who'd have thought that Stephen Hawking would supplant James Brown as dance music's most influential figure? – and the Leeds-based duo's debut emerges as a surprisingly strong release. *Dope Radio* doesn't break any new dance music ground with its blend of electro-funk and filtered disco cut-ups, but it does what it does well, and it's hard to see stand-outs like 'Mi Glad You Like It Now' and the breakbeat-driven

'Overdosed On Everything' failing to rock the dancefloors they've obviously been designed for. 'Double Double Dutch', a remake of Malcolm McLaren's finest, but least original vinyl moment, provides the LP's unexpected high point. • *Simon Ounsworth*

Producer/Engineer: Keith Binner, Tim Sheridan **Studio:** Gimp Box **Verdict:** Quality gear... 8/10

THERAPY?
SO MUCH FOR THE TEN YEAR PLAN – A RETROSPECTIVE 1990-2000
(ARK 21)

Therapy? are a conundrum. These 'Oirish' chaps never played the game by the rules, instead they made their own. Poised to make a bucketload of cash, they consistently shot themselves in the foot by releasing the opposite of what was expected. But 10 years on... Like all retrospectives, *So Much...* is a hit 'n' miss affair, with two new songs thrown in. However, Therapy?, the most popular Irish exports since Guinness, wrote some bloody good songs! And, as a definition of a band who stuck two fingers up at expectation, *So Much For The Ten Year Plan...* is as good as it's gonna get. • *Rob Turner*

Verdict: A pop/punk-o-ramic trip down memory lane... 6/10

MANCHILD
UNTIED STATES
(ONE LITTLE INDIAN)

This Welsh duo have cut a swathe through the festivals with their blend of rock, hip hop and beats, and this dozen-strong set is their album debut. Its startling opener 'Rockin' The Place', with skipping-rope effects – replete with sample 'whoo' sounds from S'Express' 1988 pop acid hit 'Superfly Guy' – is a strange, near-hysterical track that will probably lose more listeners than it wins. Which is a pity, since on the rest of the album, amid the surging guitars, there's plenty of tight vocals and nice rhythm touches, from rattling cowbells to edgy synths, cropped in all the right places. And when the formula works, it works really well, as on the included new single 'The Clichés Are True', with Kelly Jones of the Stereophonics, or the zippy 'Rehab', with Andy Cairns of Therapy?. The hip hop numbers also have some interesting verses, as well as some passionate, string-driven backing. A curates' egg, then, but one that contains far more good than bad. • *Phil Strongman*

Producer: Manchild, Mike Edwards **Engineer:** James Brown, Ali Stanton **Studio:** Fly Studios, Matrix, Real World, Warwick Hall, Raezor, Grassroots, Beethoven, Kut Masta Kurt **Verdict:** A man-sized debut... 6/10

RONAN KEATING
RONAN
(POLYDOR)

Boyzone taking a year out: it always sounded too good to be true. And now, as the threatened solo projects begin to materialise, the full horror of the Dublin fivesome's various bids for Manzone is all too dreadfully apparent. Rather than try and be clever about this, let me simply say that *Ronan* is a predictably

awful record, characterised by the kind of slick superficiality and saccharine sentimentalism that can only be justified as acclimatisation for the upcoming US elections. Inevitably, 'major league song-writing talent' has been roped in, but the likes of Steve Lipson, Pat 'Madonna' Leonard, Barry Gibb and Bryan Adams fail to add weight to a debut with more filler than a Homebase warehouse. The uptempo numbers are dull, the ballads are appaling, and the fact that Keating's existing fanbase will cart it away by the truckload isn't a justification; it's a definition of the problem. • *Simon Ounsworth*

Producer: Greg Alexander, Rick Nowels, Phil Thornally, Stephen Lipson, Patrick Leonard, Steve Mac, Bag & Arthor **Engineer:** Nathan Martoff, Brittan Spencer, Heff Moraes, Ed Colman, Moe El-Khamlichi, Gered Saunders, Paulo Jones, Randy Wine, David Schiffman, Chris Laws **Studio:** Fredonia Intl, Track

All the major album releases of the month reviewed and rated, our brand-new compilations column, and our classic sessions spot *Milestones*

Record, Larrabee, Swamp, Battery, The Aquarium, Soul II Soul, The Record Plant, Johnny Yuma Recording, Sony, Metropolis, Rokstone, Mono
Verdict: Trashzone... 3/10

LOUISE
ELBOW BEACH
(CHRYSALIS)

Louise in 'grown-up' shocker! Yep, *Elbow Beach* is certainly a substantial offering, with hardly a whiff of frothy pop in evidence. Named after a Bermudan location where she spent most of her honeymoon, Louise herself concedes that this album is something new for her. Opener 'Beautiful Inside' features more hooks than a Japanese whaling ship, while the single '2 Faced' – complete with comedy intro – is, as they say, a perfectly crafted pop ditty, offset by subtle minor keys and our Lou spitting the word 'bitch' throughout. As if we didn't know, she's not just a pretty face. • *Simon Bradley*
Verdict: Eternal who?... 6/10

SUSUMU YOKOTA
SAKURA
(LEAF)

Why should one person's minimalist ambient loops seem like wisdom embodied in sound while another's just sound like the aimless noodlings of someone who bought a load of gear and doesn't know what to do with it? Beats me. But maybe the person to ask is Japanese house and techno DJ/producer Susumu Yokota, whose recent introspective releases have surely made him the most interesting fish in electronic music's stillest pond. *Sakura* takes up where March's wonderful *Magic Thread* left off, weaving figures of amoeba-like simplicity into 50 minutes of music that seeps into your bones, creating the same nameless, but powerfully emotional effect as its predecessor. Yokota's techno leanings peep out on a couple of tracks – 'Genshi' and 'Naminota', – but, overall, *Sakura* owes more to 20th Century classical minimalism than the post-Motown sound of Detroit, and bears comparison with Eno's finest '70s recordings. • *Simon Ounsworth*
Producer: Susumu Yokota
Engineer: Susumu Yokota
Verdict: Zen mastery... 9/10

BLACK EYED PEAS
BRIDGING THE GAPS
(INTERSCOPE)

Nas meets De La Soul smoking a blunt with A Tribe Called Quest doing impressions of The Roots displaying Dr Dre's penchant for daft, but infectious choruses. I seriously love this CD, though the beats are a tad light, with the exception of 'The B.E.P. Empire' and 'Rap Song', both of which hammer like Thor. What really stand out are the vibe and flow. Whether borrowing choruses from '80s pop classics, sampling stabs from '80s funk floor-fillers, or dabbling in dirty dancehall calypso, this record is astoundingly and eclectically original. While none of the influences are exactly virgin territory, to squeeze them all into one package with such authentic aplomb is truly groundbreaking. Without doubt, an essential album – it just aggravates me how much better it would have been with a chunkier rhythm track. • *Alex Williams*
Producer: DJ Premier
Verdict: Hip-hip eclectronica – pass the peas, please... 8/10

REEF
GETAWAY
(S2)

The Reefers have been smoking up the charts for some half a decade now and the posters for this one seem to be everywhere so it must be Big Push Time. Which isn't to say that the West Country wonders don't deserve a bit of a shove – they work their songs live and know how to create fast, tight numbers with just enough slash chord melodies to grab tomorrow's stadium crowds while they're still young, crazy and impressionable. The guitar-laced 'Hold On' keeps you holding on; the shifting 'Saturday'

MILESTONES: 1972

DAVID BOWIE
THE RISE AND FALL OF ZIGGY STARDUST AND THE SPIDERS FROM MARS
(RCA)

sounds like its title, while 'Solid' is pretty, er, solid and yet... Oh, I dunno, it seems churlish to moan about this, the 'firey four's' fourth album, but it seems to these jaded ears that the band are still promising more than they actually deliver. Fans will love it, and some others will get similarly hooked, but for me, the jury's still out. • *Phil Strongman*
Producer: Al Clay **Verdict:** Not quite the Great Escape... 6/10

PHOTEK
SOLARIS
(SCIENCE)

Turning in his third album, Photek turns to minimalist 4/4 as much as, if not more than, familiar breakbeat territory, and to good effect – unsophisticated, yet laid back Chicago-infused beats, hard production, ethereal distorted pads and vox, as well as more (surprisingly) upbeat and soulful numbers. Could it be that the smart money is leaving the good ship d'n'b to stagnate through lack of diversity and direction? • *Oz Owen*
Verdict: Refreshing new direction from one of drum'n' bass' finest... 7/10

ALPINESTARS
B.A.S.I.C.
(FAITH & HOPE)

For some people the word 'synth' will forever be linked to the word 'pop', and *kraftwerk* will never simply be the German word for powerstation. Alpinestars are such people. These guys *love* their early-'80s analogue sounds with a passion, which is fair enough. As debut albums go, this is a polished affair. The first track kicks off with shimmering arpeggios and clattering drum machines which are strictly of the 'Boing Boom Tschak' variety and, this sets the mood for the rest of the album. The Kraftwerk influence is horribly evident in the metronomic rhythms and rezzy basslines, but the additions of acoustic guitar and some subtly tuneful vocals add a little variety to the Kling-Klang-esque soundscape. These are hummable, cheery tunes that you will probably find yourselves humming despite yourself. If you're the kind of Gen X, '80s nostalgic for whom Visage's 'Fade to Grey', The Human League's *Dare* and Depeche Mode's *Speak & Spell* still hold an unhealthy allure, then you'll love the Alpinestars. • *Steve Ash*
Producer: Alpinestar **Verdict:** Krafty devils... 7/10

COMPILATIONS

VARIOUS ARTISTS
EVA GARDNER PRESENTS APHRODISIAC 2
(INFRACOM)

11 dispatches from the jazzier frontiers of electronic music which Infracom have studiously avoided billing as a mix CD – though the whole thing's tightly enough segued to pass for a no-frills DJ set. Up-and-coming French DJ Eva Gardner ranges over a pretty broad musical territory, with deep house, hip hop and mutant electro bossa all represented, courtesy of the likes of Next Evidence, Bougie Soliterre and Oscar. Production values are universally high, but the overall effect is curiously unengaging, with most of the selections reproducing all of the sophistication, but none of the passion that characterise good dancefloor jazz. Ultimately, only French hip hoppers Le Peuple De L'Herbe's trilingual tribute to dope 'THC T'Aime' makes a lasting impression, and Jimpster's remake of Herbie Hancock's

'Maiden Voyage' is a bafflingly lame closer. • *Simon Ounsworth*
Verdict: Too cool to rule... 6/10

ROSS ALLEN PRESENTS:
ABSTRACT FUNK THEORY
(OBSESSIVE)

As Austin Powers might say: 'This compilation isn't really my bag, baby.' Nevertheless, overcome by curiosity I soon began rummaging around and trying a few items on for size. As is the way of such things, the initial shock of seeing myself in someone else's clothes can often be replaced by a reluctance to return them, and so it was with this album. Dishing up funky bass, electric pianos and atmospherics aplenty, it's billed as 'A Fusion of Nu-Jazz, Electronica & Funky Beats' – a slightly mixed bag for my tastes. But this is the compilation's *raison d'entre*, after all. Some less than abstract highlights include Sandy Rivera's 'Come Into My Room' – very Masters At Work – and Randy Crawford's 'Cajun Moon', which will certainly feature in my Top Ten for 2000. • *Alex Williams*
Verdict: Try some of this, it's abstract funk – in theory... 8/10

MINISTRY OF SOUND
THE IBIZA ANNUAL
(MINISTRY OF SOUND)

It isn't just the records that revolve. A listen to the latest Ministry offering shows that commercial house, now more than ever, is gorging on the past, with wholesale sampling from The Korgis, Barry White and numerous points in-between. The industry monotonously decamps each year to Ibiza, ensuring that those left behind can buy into the buzz, whilst eagerly peddling alternatives to repeat the process of new-school imperialism elsewhere. That said, Ministry always manage to provide something different from the numerous other compilations that lap up each year like the White Isle's waves. This is all about fun – two huge jocks (Judge Jules and Tall Paul), and two enormous sets, abounding in raw excitement and untroubled, up-tempo energy. If it's your thing, you get a hell of a lot of it here and it's about as good as it comes. But if it changes your life you'll need to ask yourself some serious questions. • *Ray Manny*
Verdict: Hard-hitting, sweat-soaked enjoyment... 7/10

VARIOUS
XEN CUTS
(NINJA TUNE)

An amazing collection of beats, breaks, raps, vibes, mixes and remixes from 1990 onwards, featuring the good and the great of the Ninja pantheon – from the sample-driven rare groove of T-Love and the West Country hip hop of the Herbaliser, right through to the sheer intensity of Amon Tobin and the cultural consciousness raps of Sara Jones and DJ Vadim. Which isn't even to mention Coldcut, Kid Koala, Frank Chickens, Cinematic Orchestra and DJ Food.• *Phil Strongman*
Verdict: Cuts well, very well... 8/10

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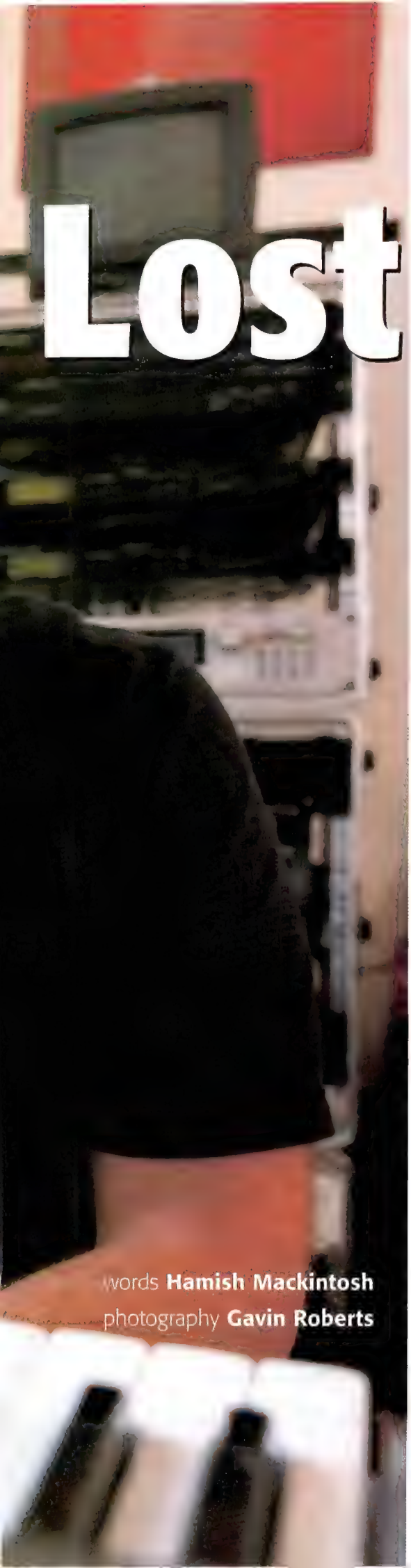

Lost in space

Times change, and musically and geographically so have Dubstar. Their newly-released *Make It Better* album sees the former Newcastle-based popsters ditching the big budget recording studio ethos in favour of a more DIY approach

words **Hamish Mackintosh**
photography **Gavin Roberts**

Anyone familiar with the intricacies of making music with computers will be only too aware of the discipline required of the process. Despite the endless possibilities new technology offers, every songwriter worth his/her salt still recognises that the spaces in between the notes are as important as the notes themselves (John Cage having previously elevated the spaces at the expense of the notes way before Cubase or Logic became integral to making music).

Keyboardist, programmer and producer Steve Hillier, one third of Dubstar, along with guitarist Chris Wilkie and vocalist Sarah Blackwood, seems to have arrived at this conclusion too, somewhere down the line of his many adventures in electronic music-making. Always known as a band willing to experiment with programmed beats and sculpted synth canvasses, Dubstar have just released their new album, *Make It Better*, which showcases a freshly hardened edge amidst a flurry of grooves and infectious programming.

Debt management

Previous albums *Disgraceful* and *Goodbye* were recorded in surroundings as salubrious as RAK in London and the sprawling Real World complex in Bath, so might one reasonably expect a similar big budget ethos for the recording of the new long-player?

Not so, as Steve explains, "When we did the last album at Real World it became obvious that a band with our set-up doesn't need to spend £1,000 a day on studios. If you record a synthesizer in Real World, then record it in your bedroom, it does tend to sound the same! I'm very excited by the fact that so much of the role of the studio has been taken on by the computer – what with VST and TDM plug-ins, virtual synths and stuff like that. On this album, most of the recording was actually done in the bedroom of my old flat. Then we went back to our old studio in Newcastle and did all the vocals and some more guitars. We ended up doing the album for about a sixth of the cost of our second album, *Goodbye*."

So, no endless days of drink and other studio diversions this time round, then? "It was a bit distracting in Real World when there was an endless supply of food and booze. I think the days of people going to huge studios are really numbered. There are definitely less bands around these days, and when you consider that most of the new album was recorded straight into Logic Audio on a Macintosh G3, why would you want to go and get yourself into a huge amount of debt?"

Bedroom antics

Why indeed. Indicative of the times, perhaps? Quantum leaps in digital recording technology are leading more and more people to bypass the traditional recording studio and create music in a familiar environment that may be more conducive to that elusive vibe. So, what else did Steve have in the bedroom to complement the ubiquitous Mac-plus-Logic combination?

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"I have a Yamaha 03D desk and an ADAT optical interface, whose communication with the Mac is seamless. We kept everything in the digital domain, which made the recording a completely painless operation. We used a new, really expensive Neumann microphone which was so beautiful that Spike [Mike 'Spike' Drake, co-producer on *Make It Better*] would kneel before it and say a little prayer to the German God of microphones!

"On this album we used a lot of Focusrite stuff. Because of the digital nature of the way we worked, Spike and I got into looking at all the digital options out there. There really is a huge difference between machines! I was originally intending to record this album on an old Roland VS880, but when we listened to it in 'laboratory conditions' it sounded awful. So we ended up using the Focusrite stuff, including a Focusrite analogue-to-digital converter, and the difference in sound quality was amazing – like the difference between a cassette and a CD!"

Steve and his 03D: "We kept everything in the digital domain, which made the recording a completely painless operation"

Synth heaven

That said, Steve subscribes to the school of thought that seeks to marry digital clarity to analogue warmth for that much-sought-after blissful union. With this in mind, what synthesizers are currently finding favour with Mr Hillier?

"I returned to some of my old favourites like the Korg Mono/Poly, which is absolutely lovely. It was the first synth I ever had and, while it doesn't have the character of a Minimoog, if you ask it to do a job, it does it with the minimum of fuss – not that I speak to my machines, you understand! It's got a weird combination of the bottom end from a lot of the American machines, but it's also got the precision of the Japanese synths as well. A lot of the bass drones came out of that machine.

"Another synth that's a sort of secret weapon of mine is the Yamaha CS10. It has a bottom end on it like you wouldn't believe! You can whack up the resonance on the filter, which tends to punch the bass out on a lot of these machines, but not the CS10.

"I've also got a Korg Prophecy, which is a dreadful machine – apart from its picked bass sound. That actually provides most of the bass throughout the new album. When you listen to it in isolation it sounds really 'modelled', but if you sequence with it, bearing in mind how a bass player would play it, sounds great."

"The sound of *Goodbye* in particular was dictated by the Korg M3R and a Kawai K4R. One day I just seemed to notice that they sounded shit! I recalled some of the sounds and they sounded like really naff sample and synthesis stuff from the '80s. So we decided not to use any of those sort of modules – apart from the Roland JV-1080, which I think is in a different league.

"If you're doing songs then don't write your songs with your equipment. Make sure the song works on a guitar or a piano. Also, you've got to listen to music. I'm getting so pissed off with the number of musicians I come across who don't listen to music." **Steve**

An analogue addict's Mecca: Yamaha CS10, Roland SH-101 and Juno 60, SCI Pro-One and Korg Mono/Poly synths

selected kit list

- Synths:
- Korg Prophecy
- Korg Mono/Poly
- Yamaha CS10
- Roland JV-1080
- Roland SH-101
- Roland Juno 60
- SCI Pro-One
- SAMPLERS:
- Akai S3000XL
- Roland S-760
- MIXING:
- Yamaha 03D
- RECORDING:
- Macintosh G3 running Logic Audio
- ADAT optical interface
- Focusrite analogue-to-digital converter
- Line 6 Pod Pro

A question of timing – the groove-worthy Akai S3000XL sampler

CD info

tracks 09-24
Steve Hillier gives a few of his favourite analogue synths the sample treatment – especially for you...

track 03
Dubstar 'Rise to the Top' (Steve Hillier version): Steve's homage to new-generation electro

"We wanted to use a very restricted amount of machines. I think that helps creativity and, if you're concentrating on equipment that you know and love, you develop a kind of relationship with it and the machines begin to work with you. I don't know who wrote the operating system for the M3R, but that person wasn't a musician!"

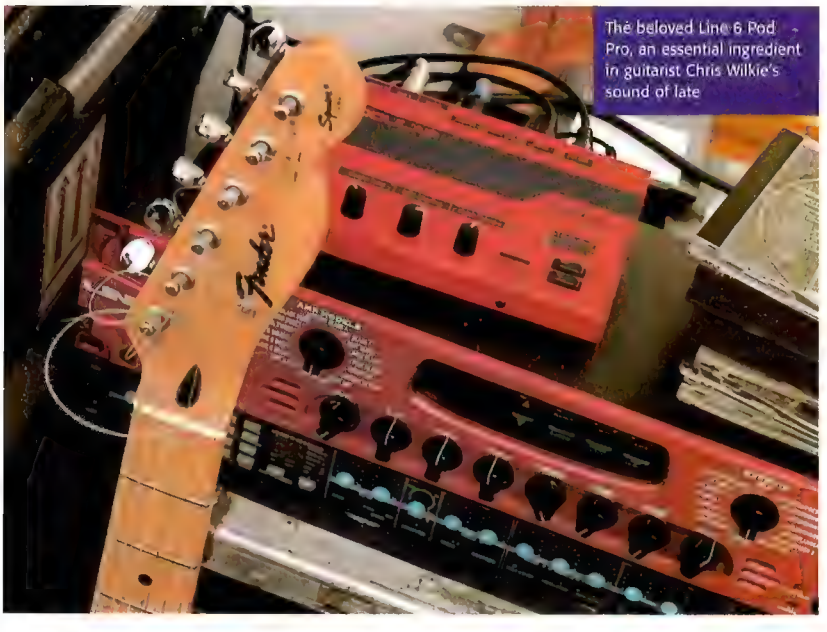
Reserve power

This idea that machines and their operating systems should somehow be still further demystified and made even more user-friendly is an increasingly common bugbear amongst musicians; if the technology is getting in the way of the creative process then the technology isn't really working. Steve even extends this philosophy to the idea that computer manufacturers should start realising that the demands of a musician on a computer are far removed from those of the rest of the computing fraternity, and points out that when using Windows (something he tries to avoid wherever possible), whenever anything happens in the background it affects the all-important issue of timing within music applications.

"It's often quite subtle, but it definitely happens. What these people need to do is develop a way of manipulating the operating system so that, rather than giving you a feeling of overwhelming processing power at your fingertips, you have a way to lock that out so you can focus simply on the job at hand – rather than having talking paper-clips offering you advice on how to write a letter!"

So, with the things Steve doesn't like firmly established, let us swiftly return to some he *does* like. What about the sampling side of the Dubstar operation – any preferences?

"We used a Roland S760, which is beautiful, but the timing on the machine is very poor. Your groove tends to go all over the place if you ask it to do too much. So we used a combination of two S760s for all the instrumental parts, where timing wasn't critical, and an Akai S3000XL for all the parts that were."



The beloved Line 6 Pod Pro, an essential ingredient in guitarist Chris Wilkie's sound of late

Branching

And so to the other branches of the Dubstar tree. Is there a favoured technique to recording Sarah's trademark vocal sound? Steve's refreshingly healthy sense of humour once again comes to the fore. "It helps if she's there! The best way is to get her vibed up and let her bash away at the vocal using just the monitor speakers and no headphones. It's kind of lo-fi, but it's the best way to get a spirited performance out of her.

"I try not to use too much compression on her voice as she doesn't have a huge dynamic range and too much compression can leave it sounding very lifeless. The rest of the magic comes directly from the Blackwood gene pool!"

How has Chris achieved the edgier sound of those toughened up guitars that drive a lot of the songs on *Make It Better*? "He's been using a lot of the Line 6 stuff on his guitar. It's the first range of virtual modelling equipment that really does sound good. Someone said recently that even the best modelling processors still lack a kind of three-dimensional quality. I don't know how much longer that will be an issue, but I think the Line 6 stuff is the best I've come across."

Word up

So would Steve care to offer any final words of wisdom to aspiring musicians and producers hungry for tips?

"If you're doing songs then don't write your songs with your equipment. Make sure the song works on a guitar or a piano. Also, you've got to listen to music. I'm getting so pissed off with the number of musicians I come across who don't listen to music. You have to listen to music – it's like foreplay!

"People doing dance music should spend some time really listening to the timing of their machines. On this album Spike and myself did a lot of shifting things around within Logic Audio, and we would find that one millisecond could really affect the sound of a groove. The weirdest thing I noticed was that if you make sure all your grooves are in time you'll find that they appear to sound faster and louder. So we came up with this phrase: 'Between milliseconds there is an infinite amount of time.'"

And there you have it. Take care over every note, but learn to appreciate those oft-overlooked infinite spaces.

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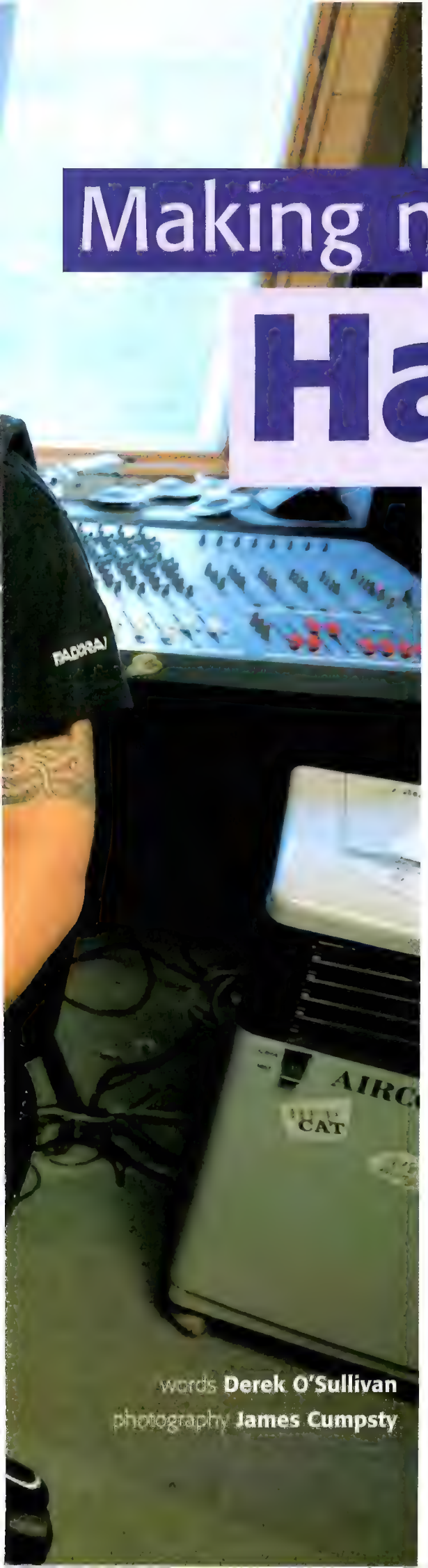
Studio 4

Making music... the Hardway



words **Derek O'Sullivan**
photography **James Cumpsty**

Recording his latest album, James Hardway took his trusty laptop on a world tour, capturing live performances from some of the finest musicians in Havana and beyond along the way...

James Hardway is the unusually innocuous pseudonym of David Harrow, a regular contributor to *The Mix*, and a prodigious engineer, producer and songwriter. His credits stretch from a long-time involvement with the On-U Sound collective to working with Jah Wobble, Dreadzone, The Orb, scoring films, and even penning the occasional hit – Billie Ray Martin's multi-million selling 'Your Loving Arms', apparently tossed off in a couple of hours – among a range of assorted fader-related activities.

Ever at the sharp end of technological advances, specifically in the area of diminution and portability, Hardway's forward view seems largely dictated by the fact that he travels so widely and frequently in pursuit of his musical obsessions. The latest James Hardway album, *Moors+Christians*, is testament to this policy of moving the mountain to Mohammed, as it were, drawing as it does on the indigenous musics of Cuba and Jamaica and fusing them with Hardway's own unique home-grown style. The result is a glorious fusion of rhythm and melody that is, quite simply, impossible not to enjoy, both as a document of Hardway's sonic reconnaissance, and as proof positive that it's possible to produce a stunning, complex album of live music with little more than a laptop computer.

So how exactly was this feat accomplished? Hardway is on characteristically garrulous form when we visit, and while the rest of his new house is in the throes of heavy rendering and redecoration, one area is incongruously well turned out – yep, it's the studio...

"I've done several albums now just on a laptop, and they've all been electronic, and all the sounds were electronic," he begins. "But I wanted this album to be non-electronic and non-amplified as much as possible, so initially I started by coming up with an air or atmosphere for each track; a motif with a tempo, basically. I tried to avoid using a beat, and aimed for a rhythmic phrase of some description – for example, one of the tracks started with a loop made from blowing into a Pepsi bottle.

"Armed with these initial parts, I went into a live room studio with a double bass player and a drummer, and we jammed down three different spontaneous versions of each of the tracks, so we ended up with about 30 separate rhythm tracks, each about two to three minutes long. I dumped all that from ADAT onto one 18Gb drive, via a Korg 1212 card, all on individual channels – drums, basses, keyboard parts – then came the first donkey work; taking my laptop away and setting up in a room with a pair of speakers and just editing and editing until I had the basic parts structured and formatted."

With these elements in place, it was time for the first leg of Hardway's travels. "I went to Cuba and hooked up with a Havana-based band called Mezcla, who I'd originally made contact with via the internet," he explains. "I got a local engineer to supervise the miking up and stuff, and played the rhythms from 'la machina', as the laptop became known, to the chief percussion player. There were eight »

selected kit list

COMPUTERS/SOFTWARE
500MHz G3 PowerBook
Steinberg Cubase
Bias Peak
Korg 1212 interface
DAC optical drive
SAMPLERS
Akai S3000
Akai S1000
KEYBOARDS
Korg Prophecy
Studio Electronics MidiMoog
Oberheim Matrix 1000
StudioLogic SL-91
SCI Pro One
Roland SH-101
Yamaha DX7
RECORDING
Alesis ADAT
Spirit LC mixing desk
MONITORS
Dynaudio M2
Yamaha NS10

'La machina', as the Cuban musicians affectionately called James' PowerBook

» percussion players in all, and although they had recorded before, they hadn't really done overdubs, so it was an interesting concept for them to get around – hearing live drums coming from this little computer."

The technical prowess of the Mezcla rhythm section was a revelation to Hardway, however – remember, these are players whose study of their instruments is akin to religious devotion. "I consider myself pretty rhythmic," he continues. "I've been fascinated with rhythms for years, but I was stunned by how these musicians locked. You'd have eight people playing separate parts, and everything just fitted together perfectly. The timing and interaction was just stunning. I actually analysed the traps player's cowbell patterns later on, and they're just dropping on the one every single time. These were incredibly complex parts, and they'd breathe as well. It really was staggering to hear, so we just threw as much down as possible.

"With the rhythms completed, we persuaded a couple of the guys to do some vocal parts – translations of lyrics I'd written – and got an incredible trumpet player down who worked on seven tracks. We were filling up tapes with so much amazing stuff!"

On completion of the Cuban stage, Hardway packed up his gear, jumped on a plane, and flew 90 miles West to Kingston, Jamaica for the third stage of the recording process. "I had connections there from my On-U Sound days," he explains. "We installed ourselves in the studio and played the basic rhythms to the various singers, players and DJs that we'd lined up, and again, everyone was blown away by what we had and really rose to the challenge. These were weird rhythms for them to work to, but the vibe just seemed to inspire everyone who got involved.

"We had Trinity, who effortlessly voiced a couple of tunes for us – just laughing while we were doing it, then Lisa Dainjah, an incredible woman, who did the same, and so on with all the other vocalists. Everyone had about 24 hours to come up with lyrics and parts and come back in to the studio and record maybe three different parts. We were looked after brilliantly by Congo Ashanti Roy, who also provided some amazing vocal parts for one of the tracks.

"From Jamaica it was then straight back to London, where I dumped everything onto the laptop again and started on months and months of really painstaking editing. I think every single note of every single instrument was edited or moved. You have to get obsessive with these things – you can't be anything else. So for four months I sat in front of a screen, working. By the end there was a tiny path from the door to my desk between the piles of junk and rubbish that had accumulated.

"When I got to a point where I was happy, we went back into the studio for a final session with a three-piece horn section – trombone, trumpet and sax – put together by our regular sax player, Theo Gordon. After that I had one final editing session, adding a few parts where I thought it necessary, by which point the tracks were kind of mixed. From there it was a question of cutting a few versions, playing them back and getting to the kind of mixes I was happy with. The idea was to try to make the tracks sound like a big live band, so I was going back and forward a lot to achieve the best results I could, homing in on the finer details to arrive at the most fluid and vibrant overall sound."

The result of Hardway's tireless efforts and meticulous attention to the minutiae are wonderfully apparent in the subsequent album. *Moors+Christians* – from the Cuban argot for rice and peas (a meal that sustained the musicians during the making of the record) – is a celebration of cross-cultural sounds and forms, surpassing Hardway's expectations and currently finding favour with punters, critics and producers alike for its innovation, technical accomplishment and sheer exuberance. In fact, with the barely apparent British summer sliding rapidly out of sight, this album is perhaps the closest any of us will get to a decent holiday this year.

You can see some QuickTime movies of James' Cuban sessions at www.jameshardway.com

"I dumped everything onto the laptop and started on months and months of really painstaking editing. I think every single note of every single instrument was edited or moved"

Looking forward – on the Hardway horizon

As a globetrotting DJ, James Hardway has once again embraced new technology to make his life on the road easier, most recently by taking the somewhat unconventional DJ'ing step of dispensing with all his records. "I've been running this thing called On The Air," he reveals. "It's radio station software, basically. I transferred all my favourite DJ'ing records and sounds to MPEG, and now I've got everything on one hard drive. You can crossfade, add effects, and at a glance you can see exactly how much time has elapsed from any particular tune. So now I can take an entire set's worth of music on my laptop, plug my VX pocket card in and DJ anywhere just from that.

"Development-wise, what I'm waiting for now is a FireWire-to-analogue multi-output – eight channels of audio in and out to your FireWire connection. I've heard that somebody's doing a Pro Tools version, so it can't be far away now."

In spite of his unstinting loyalty to Apple as far as hardware is concerned, the appreciation doesn't seem to be reciprocated, as Hardway gripes, "My other computer finally died on me after two-and-a-half years of hard work, which is pretty good going for a laptop, so I've just recently got the 500MHz G3. But I'll say publicly that having upgraded and bought Macs since my first 7600 years ago, and having done interviews in magazines where I'm holding the laptop up and the headline always reads, 'I love my PowerBook', can I get anyone at Apple to ever give a fuck of any kind? No! I can't even get them to return my calls.

"I've been beta-testing for Steinberg, and every other manufacturer I've been involved with has been really cool. It's so gratifying to get someone who designs the main tools that you use asking you about problems you encounter, and then six months later getting a new update and the bugs fixed, but with Apple, they just don't seem to be interested."

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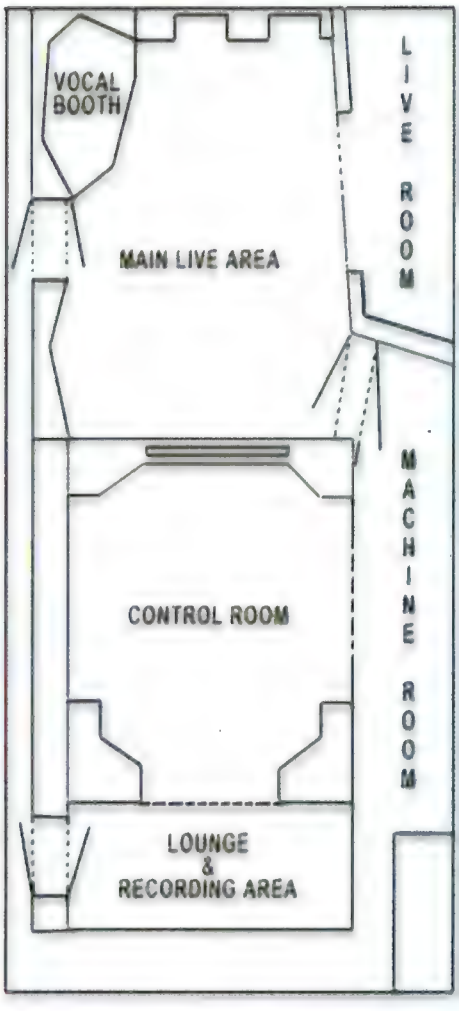

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Moles

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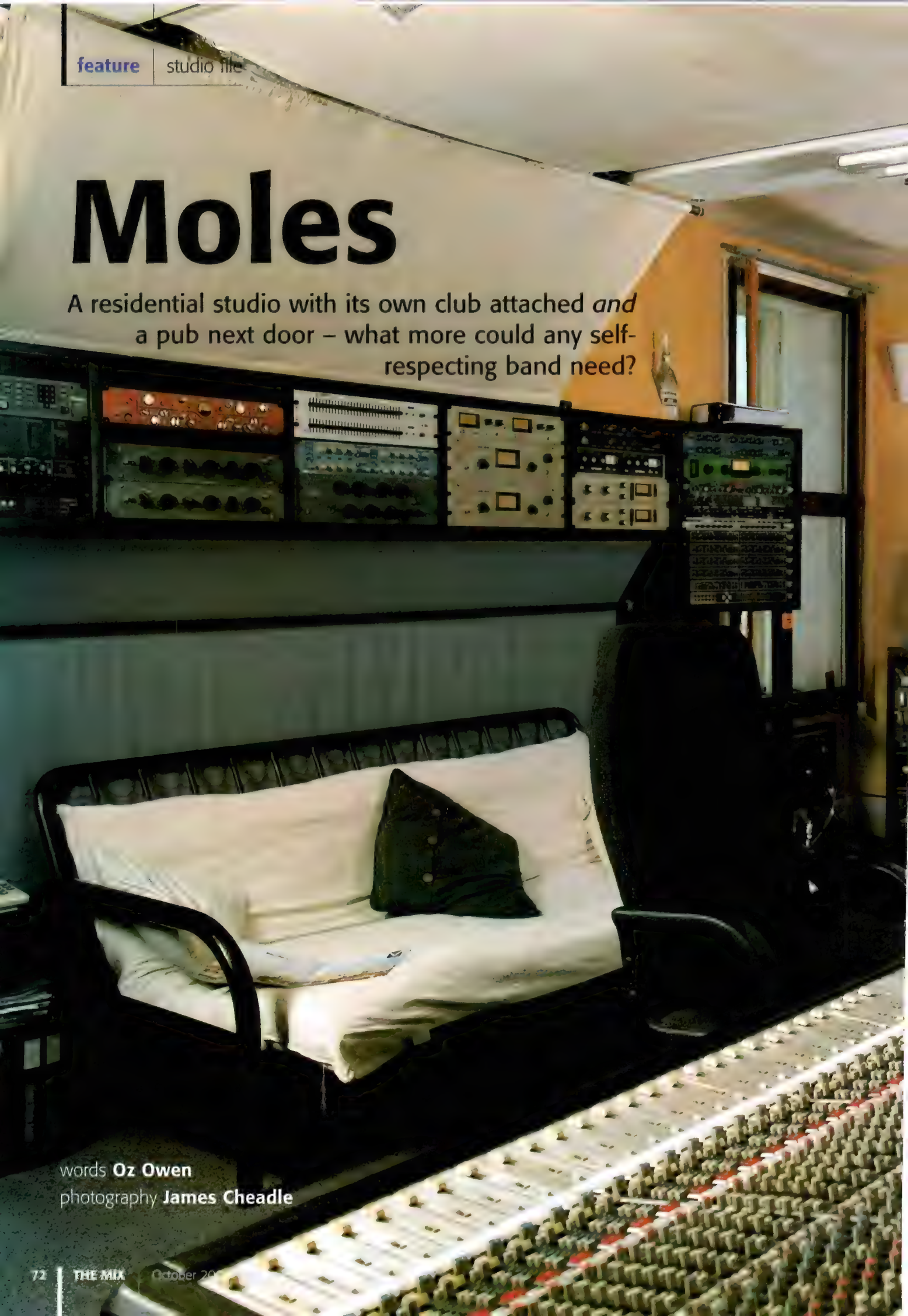

words **Oz Owen**
photography **James Cheadle**

M

bijou City of Bath, the studio sits squarely above Moles nightclub, the seed that has grown to include the studio, residential apartments and, in a stroke of pure genius, rather a fine public house. Philip Andrew, owner of all things Moles, takes us back...

"Because there was nowhere decent to play around here, I started Moles as a club, and pretty soon we started getting lots of really good bands coming through. A lot of them were going on to become very famous, and I thought it would be a good idea to record them. That was the impetus behind starting the studio, and then, as often happens with these things, the studio got a life of its own.

"We've now reached the point where we're offering all the elements that a band really needs when they come in to record. Ironically, the pub that we run next door was mainly put on because we needed a flat for the musicians, and the pub has a good sized flat above it. We looked around and thought, 'Yeah, we could do this.' That was the clincher, really."

selected kit list

[illegible]
SSL 4056 E Series with G+ computer
[illegible]
APC SCM 200A 5-way actives
Dynaudio Acoustics M1
Yamaha NS10
[illegible]
Otari MTR 90 x2
Otari MTR12
Pro Tools
[illegible]
AMS AMR-16
AMS DMX 15-80s
Eventide H3000
Lexicon 480L/PCM70
Roland SRE-555
Drawmer DS201 gates
[illegible]
dbx 160/160s
Dbx 1176LN
Teletronics LA-2A
Tube-Tech LCA 2B
[illegible]
Focusrite Red 4
Klark Teknik DN360
Orban 6420
Pultec EPQ-1 and MEQ-5s
TLA EQ1
[illegible]
AKG C12A
AKG 'The Tube'
Neumann M149
Neumann U87
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rates

from £900 per day (plus VAT) including engineer

Amen to that.

Yet a city isn't usually the first place that springs to mind when thinking about a residential facility: "The big problem I see with residential studios is that they're usually miles out in the country," responds Philip, "and all they've got is a pool table and a few computer games. What with band politics and people being on top of each other, things can often go wrong, so where we score is being set up above a nightclub in the City centre – we've got this ready-made social structure that the bands can slot in to.

"On a wider level, there's the whole of Bath, which is just a fantastic playground. And while one doesn't want *too* many distractions, the band members that aren't tracking or actually involved in a part of the project have at least got something to keep them occupied in the meantime."

And when the cavorting's done, the two people you're most likely to come into contact with are Jan Brown, studio manager for nigh-on a decade, and Dan Austin, Moles' chief house engineer. Dan has been with Moles for four years now, starting out as a trainee – nice work, given that he's a relatively fresh-faced 20-year-old.

"I started off doing live work in clubs while I was still at school, and helping out in the studio on weekends with the promise that I'd be taken on full-time when I left school, and that's exactly what happened. The way we run it is with a head engineer and an assistant engineer – the head engineer trains the assistant engineer, who then takes over. I've been head engineer for about a year and now I'm responsible for training the assistant.

"A big part of the job is dealing with the people and politics, knowing how to react in certain situations – especially in a residential studio. You're living with people for months, and you see so many different moods in people, either getting really frustrated, because something's not going quite right, or, alternatively, when the work is going really well. You've got to know how to deal with people in all situations."

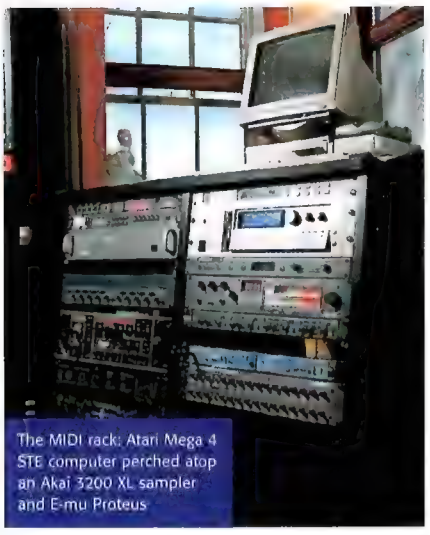
The studio is 48-track, running two Otari MTR-90 2" machines, with a recently installed SSL desk – an E Series with a G-class computer – and a shed-load of old valve mics, EQs and compressors that are a big feature of the studio, as Dan explains. "I think all that classic gear sounds amazing. We've had a couple of people in who haven't used gear like that before – like the old Pultec EQs, for example. I've suggested they give them a try, and they've just loved them. A lot of other people may have the same gear, but we have got quite a collection here."

And, in terms of recording, Dan shares the same analogue views, although he's certainly not averse to the odd bit of digital. He may have learned his trade recording with 2" tape, but Dan is seeing more and more clients bringing a Pro Tools rig with them – a format that the studio is currently embracing.

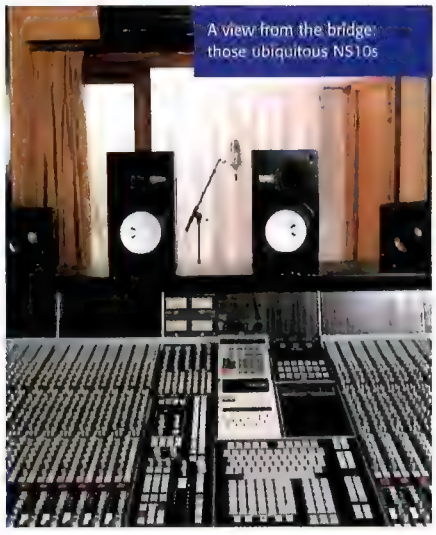
"The great thing about Pro Tools is that you can carry a project around on CD, or whatever, and take it virtually anywhere and work on it," says Dan. "We're sorting out a Pro Tools suite downstairs so people can come and mix and edit downstairs in a smaller room. That way they're not paying silly money every day to use a computer in the corner of a room while not using the rest of the room.

"The Pro Tools rig will be integrated into the main set-up, so we can pipe stuff down to the programming suite for editing, and so on, then back up for mixing. We've done that in the past where people have brought Pro Tools systems in and we've integrated the whole building as one studio. So now we've got that permanently – it means we can have either one massive studio working, or two sessions going on

Moles has no fewer than five separate live areas, each with distinctive acoustic properties


The MIDI rack: Atari Mega 4 STE computer perched atop an Akai 3200 XL sampler and E-mu Proteus

Moles studio manager Jan Brown and chief engineer Dan Austin take five


A view from the bridge: those ubiquitous NS10s

» at once, remixing down here or mixing upstairs and so sharing the space."

Jan, the studio manager, concurs completely: "It's an important addition to most studios these days. To have a programming suite with Pro Tools naturally links the working process between the programming suite and the studio. No doubt it will tie up the two areas of work much more closely."

But surely in this digital age it's hardly the norm for someone as young as Dan to have more experience of analogue recording techniques than the increasingly popular and practically industry-standard digital formats?

"It's great to have all this knowledge based on analogue gear, and integrating Pro Tools into it as a tool adds a new level – not as an exclusive recording and mixing system, just using parts of it," counters Dan. "I've seen a lot of producers come here who work like that. With plug-ins you're never going to have the random element you get with some outboard. They don't do those quirky little analogue things, because computers run them perfectly. That said, some of them are absolutely amazing – some of the new valve modelling compressors they've brought out, for example, are absolutely brilliant."

That's not to say they'll ever replace the studio's wealth of vintage outboard, however. "We've got these Pulteq EQs – two MEQ-5s and an EPQ-1, which are probably my favourite bits of gear in the studio," Dan enthuses. "They're just amazing old valve EQs with huge great knobs on them, and the EQ curves on them are just beautiful. You can easily put them across everything – they're that nice!

"There's also a Focusrite mic amp we've got that distorts really nicely, but I probably shouldn't mention that, as it costs a lot of money! The valves on that distort really, really well. And we've got a lot of good drum sounds and vocal distortion sounds by putting them through one of those – you get this brilliant harmonic distortion out of them.

"The classic old trick that a lot of people use is with the Urei 1176 compressors – you can stick all four of the ratio buttons in, which you shouldn't be able to do, and they just go crazy! If you really whack up the input gain, the drum sounds you get are just mental – crazy stuff, like Chemical Brothers kind of beats.

"I use a Roland Chorus Echo quite a lot as well. You just slam stuff in to that, and then feed it back on itself. It's great for backing vocals – running a distorted reverb signal really quietly in the background. It works well on female backing vocals, for example – you get sweet harmonies going on, with this distorted chorus echo, really subtly underneath in the background. It can give a little bit of space and real energy to it. But I'm right up for really slamming stuff in when it's needed – not always, obviously!

"The key is to keep it simple when you're recording. That's the best bit of advice I can give – don't get carried away with it. But, at the same time, you've got to experiment. When I'm recording drums, for example, I put seven or eight basic mics around the kit, then stick one in a corner and one in a cupboard. Try bringing them up on the desk, and if they work, they work; if they don't, then just forget about it. Experimenting is definitely worthwhile as long as you're not under pressure."

The recently installed Pro Tools rig will no doubt have Dan experimenting for a while yet, but in this present climate of turbulence in the industry, what does the future hold for Moles?

"I think this proliferation of project studios is an area of concern for top-flight professional recording studios," Philip tells us, "but, at the end of the day, you can *never* replace personnel – quite simply, you can never replace a well-crafted room with the right equipment and the right personnel.

"I think the internet, if anything, is more of a threat than the home/project studio, because the internet could undermine the viability of record companies. If record companies are undermined, there won't be any cheque books around to pay for facilities.

"The jury's still out as to how that one is going to pan out, but I don't think the home studio will ever replace the professional facility. I think it's replaced those middle-ranking ones, which is where we were before we got the SSL. A lot of people will go the project/home studio route, but if they want a really good job they'll go SSL. And that's the parting of the ways, really."

More from: Jan Brown, Moles Studio, 14 George Street, Bath BA1 2EN
Tel: 01225 404445/6 Web: www.moles.co.uk

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running your own part two record label

So, you've got your label and you've signed an act. In the final part of this article, we take things one step further – getting that act's recordings onto the record store shelves...

Designing a logo for a record label, registering its name, signing a band or an artist, and paying for them to record and manufacture a single or an album is only part of an aspiring record label mogul's story. Now the hard work really begins...

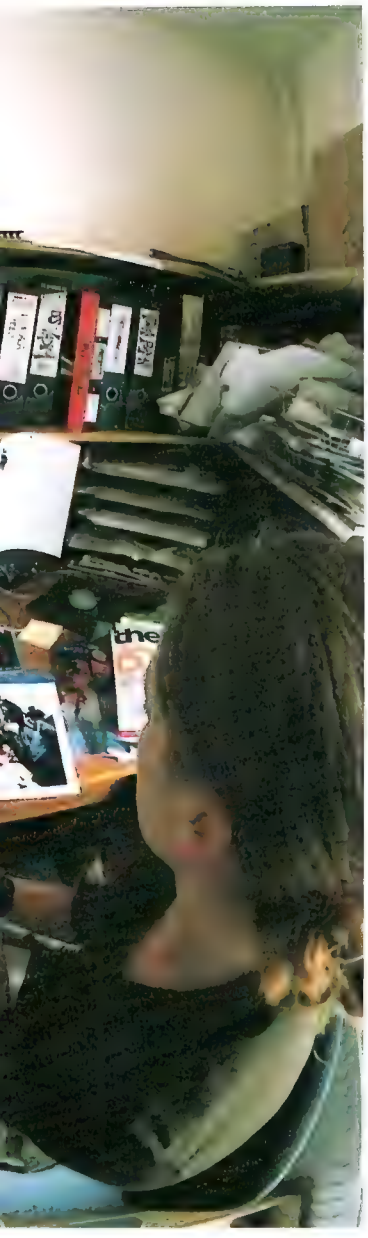
A record label, independent or otherwise, is out to make a profit, just like any other business. They do this by recouping the money they have shelled out in signing an act and paying for them to record an album or single. The most important question you should be asking yourself here is, 'How can I get people to listen to my act or acts?' Once people know about the act(s) on your label they will, hopefully, buy the releases and send you merrily on your way into *Who Wants To Be A Millionaire?* territory. But, just like those hopeful TV quiz contestants, the road to glory is full of dilemmas, and it's here that a record label will either succeed or fail. As Digby Pearson, owner and managing director of Nottingham-based label Earache (and our intrepid guide in last month's instalment), stresses, "When I started it was a bit more exclusive. Virgin, Atlantic, BMG – they're all the same. Not many labels start with huge backers."

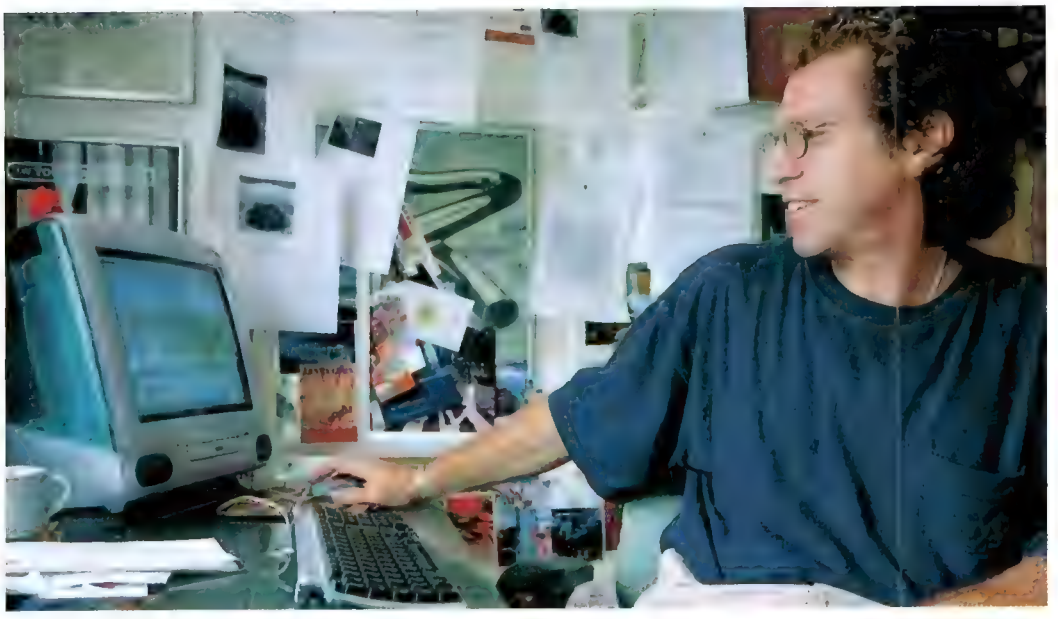
Like anything in life, though, if you're prepared to work very hard then who knows where it might lead. There are many avenues open to a record label to get its albums and singles in the shops, played in night-clubs, on the radio and even – if you're extremely lucky – priceless airtime on television.

Gaining a promotion

Your fledgling label will be faced with a choice immediately after pressing its first album or single: do you handle the press and promotion by yourself or do you hire a dedicated public relations (PR) company? The former option can save you a hell of a lot of money, but rarely provides as effective results as the latter. A PR outfit will be experienced in breaking new bands or product, and will have a network of established contacts – essential if your artist or act is to succeed, and, likewise, if you, as a label, are ultimately to survive past your initial release, too.

It's fairly common practice for an independent record label to take an interest in the presentation and promotion of an act. This is known as 'grooming'. Some idea of media presentation and the creation of image





words **Rob Turner & Phil Strongman**
photography **James Cumpsty**

may prove invaluable here for the would-be record label entrepreneur. After all, the more striking an image, the more likely it is to stick in the minds of the record-buying public. A prime example of this is the Spice Girls. Entirely manufactured by their record company, their image provides a handy peg on which to hang the 'Girl Power' sloganeering soundbite synonymous with the group and their releases.

A music PR company will usually work for a percentage of sales and revenue from the sales of the recording – providing you can persuade and sweet talk them enough. It's important to prioritise the promotional needs of a specific act and target the correct market. For example, getting a band like Slipknot on children's Saturday morning television would be foolhardy as the traditional audience of such programmes is not normally associated with extreme rock music.

Digby offers some invaluable advice. "Sometimes a label can get too big an idea. You can't take your audience for granted. You have to be the best at what you know and exploit that to its full potential. Competing with the majors on promotion is perhaps the hardest thing ever. Indies *can't* compete; we have to work that much harder. We can't just phone up MTV and say, 'Here's the new Deftones,' or, 'Here's the new George Michael.' But majors *can* do that, because they've got artists who are selling 10 million records, or whatever, so they've got that much more clout."

A question of distribution

For a record label to survive, it boils down to how many albums or singles they sell. It's as simple as that. So, distribution is one of the most important factors for an aspiring independent record label. There are two ways to approach this: the first is a regular distribution deal whereby the label pays for the manufacturing of an album or a run of singles and the distribution company sells the product, on behalf of the label, to outlets like Virgin, HMV or Our Price, to name but three. A distribution company, like Universal or Pinnacle, will take a 25 to 30% share of each unit sold. The second, and more uncommon, method is a Manufacturing and Distribution (MD) deal: if a label has signed an act which they think has a lot of potential, but doesn't have the funding to pay for the manufacturing, the distributor may decide to also invest in manufacture. Occasionally, the distributor may even invest in production as well. Your record label will not receive any profits until »

The internet and the independent record label

The net is changing the face of independent record labels and up-and-coming artists at the click of a mouse button. As home recording and online downloading technologies improve at an alarming rate, the role of the independent record label is going to be radically different to what it was as little as 10 years ago.

Digby Pearson recognises the power of the internet and offers a potential scenario for any enterprising record label owner. "The net cuts out all the middlemen. If this is the new way to get hold of music then why should a band sign to an indie when they can distribute and market it themselves? The role of the independent record label is going to become a specialisation point – kind of like a guide.

But if everyone and their dog is going to start putting music on the internet, then where do you start looking? If you log on to get information about heavy rock, dance, trance, or whatever, then someone, somewhere is bound to have already put up a dedicated website, but the problem is often finding that information – unless you're prepared to just to randomly click on names on an A to Z basis. If I was forming a label now I'd call myself Aardvark!

"Independent record labels are going to become a distillation of what we do at the moment. We'll eventually be selling MP3s instead of CDs and hopefully bands will want to join our label because of the name we've built up. In the end, it doesn't matter whether it's in the real world, or a virtual one. People will, hopefully, trust your judgement, because you know what you are doing. Again, it's because you are an expert in your chosen genre."

» the distributor has recouped its initial investment. There is another option, but this is only successful on a local level: self-distribution will generate much higher levels of profit, which may be essential when you are trying to establish yourself in the fiercely competitive world of independent record labels.

Licensing is another avenue, closely linked to distribution, which can generate much-needed and very lucrative profit for the fledgling and established independent record label alike. "There is just so much money splashed about by the majors." says Digby. "When you hook up with a major [who agrees to distribute and market your acts for a certain percentage while you retain overall ownership] the budgets just become stupid. Consider anything which is done on an independent record label for a certain amount of money; the majors wouldn't even blink an eyelid at spending 10 times that amount."

Pressing your advantage

Even if you manage to negotiate a deal with a distribution company, you could begin to make a buzz by yourself by pressing a limited number of white labels and making them available in specialist record shops. Demo copies, flyers and band biographies should also be made available to radio stations and their DJs, like John Peel or Steve Lamaq, who specialise in playing records by up-and-coming bands. Club DJs are equally important recipients – if not more so. "Club DJs are the lifeblood of any independent record label," states Digby. "It's a case of 'you scratch my back; I'll scratch yours.' In return for them giving our acts airplay, we give them promotional and advance copies in order to do this."

If the feedback from your white labels and promo copies is good then, for most styles of dance music, it's usually standard practice to have the first 1,000 copies pressed up on vinyl. CD is the preferred medium for other genres. You will then have to pay the Mechanical Copyright Protection Society (MCPS) 8% on top for music publishing fees, but promotional items are, fortunately, exempt.

It's of paramount importance that you, as the independent record label, set a release date with the distributors. Often it's beneficial for artist and independent label alike if this coincides with a DJs club residence or a mini tour by the artist or act. It may prove very lucrative, publicity-wise, to make review copies available to music magazines and publications at least two months before the record hits the streets. It's essential you provide accurate and up-to-date biographies and photographs. If you've got any petty cash left after your initial costs then invite some radio pluggers and press representatives to the launch party.

Digby stresses how important the rock and alternative press is for the ongoing longevity of Earache. "Magazines like *Kerrang!* and *Metal Hammer* are so important. We're all working on the same page." Clearly, the power of the press cannot be underestimated, in whatever genre. They can be the key to success for your band or artist, and ultimately whether your independent record label becomes a household name or another failed business.

Words of wisdom

"I'm making this out to be the Life of Riley," concludes Digby. "There *is* a hell of a lot of work involved, but it isn't quite as hard as it used to be. When I started off it was a bit more unusual to own a record label. It's harsh out there now, because a lot of people want to do it. My advice? Don't do it! Do the lottery instead. But if you're a real gambler then start an independent record label. You've got to be obsessive about what you're doing and be ready to give up a lot, but it's worth it."

So there you have it, folks. With the right advice and more than a little luck, there's no reason why you shouldn't be sitting back and waiting for the millions to roll in – after you've discovered, signed, nurtured and successfully marketed that elusive future musical talent. *(RT)* »

useful addresses

Membership of some trade organisations can help in the initial stages of an independent record label's life. The knowledge they provide can be invaluable and cost-cutting, so obviously it would be advisable to read up thoroughly before you even think about signing up The Next Big Thing...

Mechanical Copyright Protection Society (MCPS)
Elgar House, 41 Streatham High Road, London SW16 1ER Tel: 020 8664 4400

Phonographic Performances Ltd (PPL)
1 Upper James Street, London W1R 3HG
Tel 020 7437 0311

The British Phonographic Industry (BPI)
25 Saville Row, London W1X 1AA Tel 020 7851 4000

UMBRELLA
P.O. Box 763, London W1P 4AA Tel 020 7655 9000

Who Wants To Be A Millionaire?

Our step-by-step guide to starting a record label

1.) Design a logo and get your name registered – preferably as a custom-made company. This will cost you much head-scratching and a couple of hundred pounds. Congratulations! You're now a record label.

2.) Get your company VAT-registered, as this will save you money later on.

3.) Arrange a meeting with a small business advisor at any local high street bank – if you're unemployed, you may be eligible for government aid when starting, and there are other grants/schemes available that may apply, depending on your age, status and locale.

4.) Decide on a genre, and sign a band or act to your label. If you haven't got a bottomless pot of cash to pay your artists, then you'll have to offer a larger royalty – maybe double, or even treble, the usual 8 to 15%.

5.) Try to get a PR company to take your artist's new single or album on – don't forget, some are willing to work for percentages.

6.) Get the material recorded, mixed and mastered

7.) Start approaching distributors, like Pinnacle or Universal, to see if they'll take copies. Even if distribution falls at your own feet, do not despair; begin making waves yourself by pressing up a few white labels and promotional copies and sending them out to DJs, PR companies and media representatives.

7.) Fix a release date with the distributors, get the PR machine rolling, throw a lavish launch party, sit back and pray... er, wait for the millions to start rolling in!

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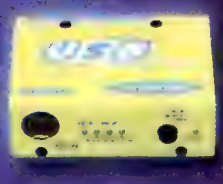

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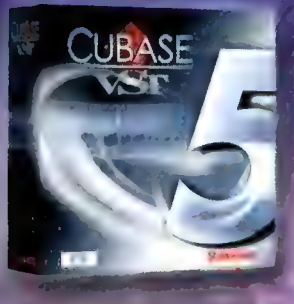

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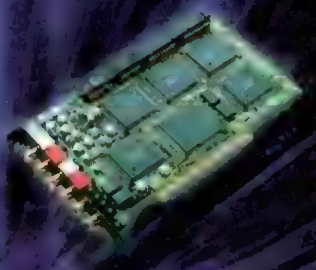

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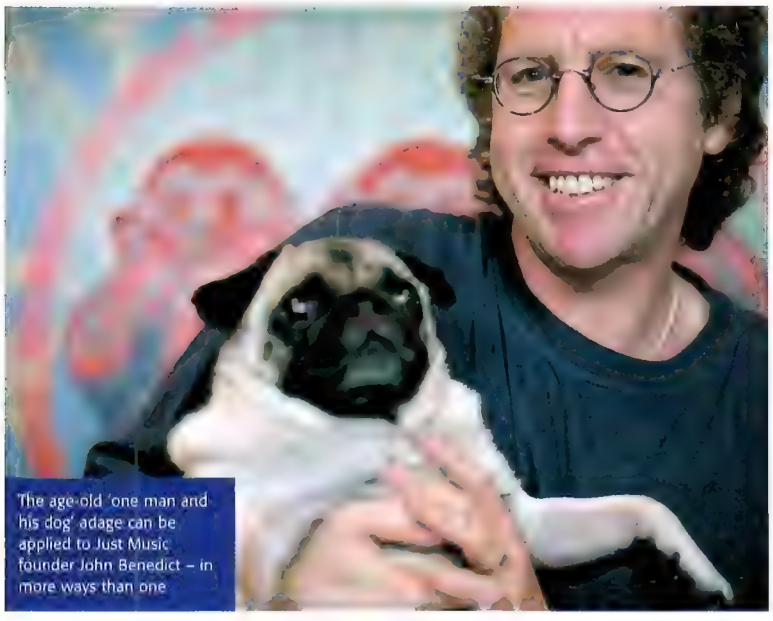
label profile

Just Music



The age-old 'one man and his dog' adage can be applied to Just Music founder John Benedict – in more ways than one

"The worst thing I've heard recently is one major label buying up all the airtime in certain shops. If you want to hear a track played in those shops, you can't – unless it's on that particular label" **John**

Many of those starting independent labels – perhaps a majority, even – secretly hope that their music stable will be quickly snapped up by a major. Because then, while you're still able to issue music, you have no more debt or supply worries and, on top of that, you could be bringing in a near-six-figure salary. Perfect, apparently. Yet John Benedict's Just Music label is a rarity, a case of the exact opposite.

John was Managing Director of China Records for the company's last five years, its most successful period, when acts like Morcheeba and the Levellers broke into the charts. This was after "doing 15 years" at MCA, Chrysalis and Polygram. But when Warner Music bought up China in late 1998, John ignored overtures from other majors and instead opted to start his own one-man Just Music marque.

Just Music is a purely instrumental label – barring the odd vocal sample, of course – which uses artwork from original paintings and recycled sleeves to get across the green 'organic music, organic label' message that John himself believes in. Chill-out artists like Viragi, featured on the last *Q* magazine CD, and multi-instrumentalist Michael Cruger have already made waves since the label's July 1999 launch. The latter is due to appear in London Weekend's *Ibiza* series. Reviews have been good, everywhere from *The Observer* to *Hi-Fi Choice*, and sales have been promising, too, but, as is perhaps to be expected in any new venture going against the established grain, none of it has been easy.

"Having always worked for, and with, 'the big boys' I didn't realise just how difficult things were on the outside," John divulges. "Almost everything I do is DIY now. Being a 'one man and his dog' label is strange after you've had a couple of dozen people directly working for you. And out there everything is geared to mass production – take the matt recycled card sleeves we use: they do stand out and they have given us a certain 'in' with various festivals and underground mags but, because we order thousands rather than hundreds of thousands, the cost is nearly two quid a time – 10 times what a major would pay. The other big disadvantage to being small is getting your stuff out there. Many of our CDs are heavily tied in with the whole Ibizan-Balearic, chill-out trip, which happens to be quite fashionable at the moment – though I didn't know that when I started – and other indie successes like Moby and Moloko who have created a more positive atmosphere for that kind of mood to work in.

"Yet, in the big music chains, it's getting harder and harder to get albums accepted. Some will want £1,500 or more just to accept your album, and even then it's all on sale or return, while getting on listening posts even for a few days can cost hundreds of pounds. The worst thing I've heard recently is one major label buying up all the airtime in certain shops. If you want to hear a track played in those shops, you can't – unless it's on that particular label. It would seem to be getting all very monopolistic."

But having broken out of the major mould, John's not about to give up now. Along with the Just Music website and special Just Music postcard and CD display cabinets – ideal for music shops, art galleries, wine bars, market stalls and health stores – John's also decided to serve on the Serious Matters Committee for the new Association of Independent Music (AIM). "AIM

label profile

Ninja Tune

Things can be difficult on the outside – providing something different is a real challenge

Label Manager Peter Quicke sums up his role: "I make sure the music we release is good and that we don't go bust"

A reminder of John Benedict's former glory days at China – a Morcheeba 'umpteen sales' disc...

is aware that indies are unique when it comes to the musical food chain since, whether they like it or not, the indies have to provide something different, something alternative that has real value. They also can allow, as I hope I am at Just Music, artists the time to develop their talents to the full. Majors, chasing million-pound campaigns with their frenzied 'three for the price of two' marketing ideas, are usually too big and anonymous to do that. 25 years ago they all ignored Mike Oldfield, so Richard Branson stepped in and suddenly *Tubular Bells* was a million-seller. It can still happen now. It's just that everything's a lot tighter these days, a lot tougher. But maybe that makes it more of a challenge." *(PS)*

Ninja Tune are living proof that an indie label can go its own way, survive and even thrive, despite being surrounded by majors and monopolies. It's now 10 years to the month that Coldcut, then the Coldcut Crew, launched their own London-based label, naming it after the near-mythical Japanese stealth warriors, a label now described by *Rolling Stone* magazine as being amongst the most important indie ever.

Club DJs Matt Black and Jonathan More had already scored hits in their own right – as well as putting Yazz and Lisa Stansfield into the charts for the first time (and later giving All Saint Melanie Blatt her first break) – when the boys broke free of Big Life to start Ninja Tune. Their aim was to provide a label that could issue Coldcut works, plus the material by other artists that Big Life, and others, had considered too leftfield. And over the last decade they have succeeded – from the near-legendary Jazz Brakes, which helped post-house beats break through in the UK, through the success of acts like the Herbaliser, Funki Porcini, Amon Tobin, Mr Scruff, Kid Koala and DJ Vadim, as well as clubs like the much-missed Stealth night. Coldcut were up and pioneering on the web in 1993 and their Solid Steel radio show continues – after 15 years – to go out on BBC London Live at midnight on Mondays, while their Pirate TV webcasts live on Wednesday nights.

But despite all the media fuss – and albums that surprised everyone by re-entering the *Music Week* Dance Chart and reaching the No.1 spot – label manager Peter Quicke refuses to forget fundamentals. "We've built up the label with quality music that was, and is, genuinely different. When the label's »

"Having a long established website, and a web radio show that goes round the world, has also helped. We now get over £70,000 worth of sales annually from the net" **Peter**

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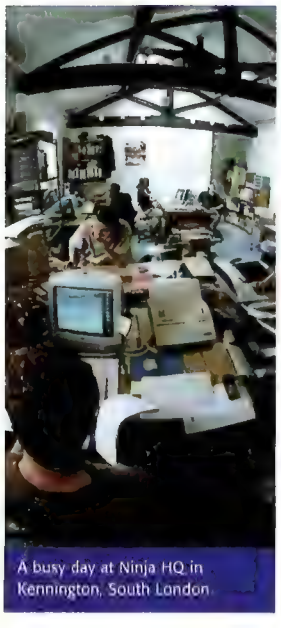
Founded by hit-makers Coldcut, Ninja Tune now employs nine full-time and a horde of part-time staff.

A £30,000 investment in setting up a North American distribution office has paid off – the USA is now Ninja Tune's biggest market



A busy day at Ninja HQ in Kennington, South London

identity started to get a bit blurred we began the Endtone sister label so people could develop an idea of what to expect from Ninja Tune. We put out some great records, virtually from the start, but to keep that going there's two other lessons you have to learn – they're surprisingly easy, but I think that you do have to take them onboard: the first is never to over-reach yourself – we can't, for instance, really afford to blow more than a few hundred pounds on pop videos. We did a couple of times before; we once lashed out £5,000 on one, but it didn't make any difference to sales as there's so few places that will broadcast non-mainstream stuff, anyway. Stations like MTV won't help you because they mostly playlist videos that have had, say, £80,000 spent on them. It's obviously more flattering to have labels coming up to them saying, 'Oh, look, we spent this much to impress you'. An indie can't compete on that level and shouldn't try. It's the same with publicity. For labels like us, it's usually better to work with magazines that are more underground – chasing the more established ones can be a waste of time.

"The other key to really keeping it together is international distribution: it's all about selling two or three thousand copies of something in every territory you can break into – which often means not selling off your overseas licensing. We shift stuff in France, Italy, Germany, Japan, Spain, Holland, Australia, Norway, Iceland, Portugal and Belgium and we have our own North American distribution office in Montreal run by Philippa Klein and Jeff Waye who'd imported Ninja tunes into Canada before. Being in Canada's almost as good as being in the USA, business-wise, as costs are lower and there's no trade restrictions. It cost us nearly 30 grand to help Philippa and Jeff start up, but it was well worthwhile as the USA is now our biggest market. Having a long-established website, and a web radio show that goes round the world, has also helped. We get over £70,000 worth of sales annually from the net."

With Ninja's reputation as the thinking person's beats label you might be forgiven for thinking they make a killing from vinyl 12" singles, too, but Peter surprises again. "When we were starting out we'd get foreign shops importing vinyl from us – especially 12" stuff.

Though undeniably important to DJs, the 12" vinyl format has never been profitable for Ninja Tune

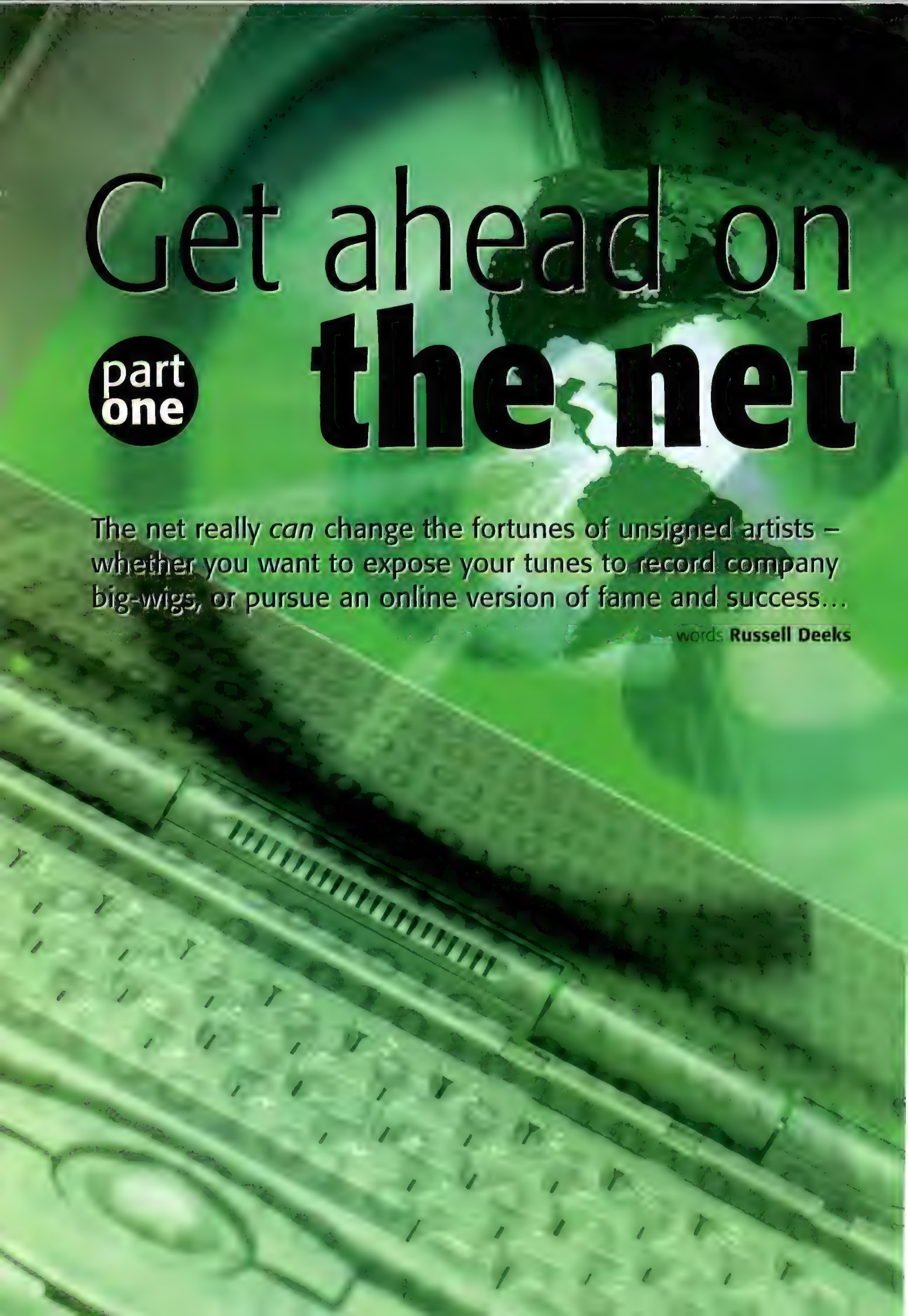
A long-established website and worldwide web radio show is pivotal to Ninja Tune's success

In da house: legal, internet, international, radio, touring, PR and merchandising departments

That's because nearly all import places are specialist shops who really push vinyl, but the problem with 12" singles is we've never made any real money on them – never. We'll always release some of them, just as we'll always have most albums on vinyl, too, since it's promotional and highly-collectable for the public, as well as loved by club DJs. Just don't expect to make a fortune from them – especially the singles."

On the horizon Peter sees Ninja releasing DVDs in the near future. "We've always had good visuals and CD-ROMs and stuff so when the DVD mastering costs come down a little – they're currently 400% more than a CD glass master – we'll go for it."

As for the next few weeks, these have been set aside for celebratory gigs and club nights commemorating the first full Ninja Tune decade, climaxing on the weekend of September 23 and 24 with events at The Scala and the infamous Ronnie Scott's. The *Xen Cuts* double album, a kind of Ninja anthology of hits and rarities, gets released at the same time. *(PS)*



Get ahead on the net

part one

The net really *can* change the fortunes of unsigned artists – whether you want to expose your tunes to record company big-wigs, or pursue an online version of fame and success...

words **Russell Deeks**

Talk to certain figures in the British record industry and you'd be forgiven for thinking that the only time you're going to need to think about MP3 is when tracks from your platinum-selling album are being carelessly swapped about by Napster users all over the globe. In fact, nothing could be further from the truth. MP3 offers upcoming musicians – and producers (as we'll look at in next month's feature) – opportunities that were simply never there before.

As a reader of *The Mix*, you probably know what MP3 is by now, but in case we've got any newcomers joining us, let's have a quick recap: MP3 is a file compression format used to reduce the size of music files stored on a computer. A typical five-minute song that might take up 50Mb of disk space in .WAV format can be reduced to just 5Mb without too much loss in quality – a size that makes the transfer of music files on the web and by email a viable proposition for the first time. MP3 has been around since 1996, but it's only in the last couple of years that it's really taken off as a way of distributing music online.

Most recently, MP3 has been in the news because of Napster, the file-sharing program that makes swapping MP3s – legal or otherwise – easier. (For more on that, see the *Everything You Ever Wanted To Know About Napster* box on page 79, but that's a separate issue.) Nor are we going to get bogged down in the endless sound quality arguments. It's true that MP3 files aren't quite up to CD quality, but, for now, let's just accept the fact that MP3 offers reasonable sound in an easily-manageable format, and see how it can work for you.

Online benefits

The primary benefit MP3 has to offer upcoming musicians is that the web is full of sites that let you get your music heard by huge numbers of people. Whether you're hoping your track will get picked up by an A&R man at 'Big Record Company, Inc.', or are happy to pursue a new, online version of fame and success, there's no shortage of sites to help you. Perhaps the most famous of these is mp3.com, but there are plenty of others: Vitaminic, Peoplesound, IUMA, Besonic, Musicunsigned, and dozens more.

How these sites work varies. They'll all accept your music for posting online, but some will want to run it through their own A&R process first; others run a completely non-vetoed service. Some will give you your own pages that you can fill up with graphics, biogs, and even video clips, while some simply shoehorn your very brief details into a pro forma HTML page. And some offer related services to help the struggling artist, such as an e-newsletter service to keep your new fans informed of new material, or an 'artist community' that will help you link up with other, like-minded artists, producers or remixers. Most sites operate on a non-exclusive basis, though, so as a rule of thumb, it's probably the case that the more sites you stick your music on, the better, because more people will get to hear it.

Doubtful that it will help? Don't be. There are countless examples of artists who've gotten a record contract on the strength of the music they've posted online, while others have found it's perfectly possible to attain a level of success they're happy with – without having to put themselves through the record industry mill.

Where to stick it

Good sites for posting your music online:

www.peoplesound.com
www.vitaminic.co.uk
www.musicunsigned.com
www.besonic.com
www.garageband.com
www.popwire.com

The secret of my success

As an example of the former scenario, take garage outfit Da Funky Bitz – the studio project of DJ Lisa Unique (from Twice As Nice) and partner-in-crime Pete Martin. They put their track 'Positive In Motion' (featuring vocals from Da Click's Valerie M) online at peoplesound.com, and it was soon snapped up by top garage label Nice 'N' Ripe. "I think having your music heard on any website is great," Lisa enthuses. "For anyone who's tried to get signed to a label, or for bands that want to get recognised, it's an opportunity you can't turn down."

Another case in point is reggae/soul producer Curtis Lynch, whose 'Thinkin' Of You' track – featuring Kele Le Roc and Red Rat – was posted at musicunsigned.com, then quickly signed to Telstar. Or there's Lain Gray – the man who collaborated with man-of-the-moment Wookie on the much-vaunted 'Battle' track – who got his contract with Soul II Soul on the strength of a musicunsigned posting, too.

Looking at more 'traditional' bands, Swedish hard rock act Sideburn found their posting at popwire.com won them a record contract with Italian label Vinyl Magic – one of 10 record deals Popwire has helped bring about.

There are plenty of other artists who are making it without a record deal, though. Take MP3 chart-topper Ghost In The Machine, the recording pseudonym of Las Vegas business management graduate Mark Hlobil, for instance. With up to 100,000 people downloading his Euro trance tunes from mp3.com each month, he's so far earned over $13,000 under their 'Payback For Playback' scheme (whereby a certain amount of the site's profits are divided among artists in proportion to the number of downloads they've accumulated). Mark has also managed to shift over 2,000 copies of his *Liquid Dreams* CD.

But the benefits of distributing your music online don't end with the cash. Says Hlobil: "Another major benefit is the contacts I've made through sharing music online". A particularly good site on this score is besonic.com, whose artist community area can help a drum'n'bass artist in Bristol, say, hook up with a soul diva in Berlin, or a house producer in Leeds arrange a trance remix by a DJ in London.

Another MP3 act who have experienced the benefits of bypassing the traditional record industry are LA-based rock group Jenna Music, whose music is available at mp3.com as well as at their own site, JennaMusic.com, and has also been used in various TV shows including *Dawson's Creek*. Frontwoman Jenna explains: "We've sold 15,000 copies of our CD so far. Now, if we were with a big record label, we might sell 100 times more than that, but then, because of the way record deals work, we'd probably have to – just to make the same amount of money. This

Everything you ever wanted to know about Napster – and more

So what exactly is Napster, then?

In a nutshell, Napster is a software package that lets you share MP3 files with computer users everywhere.

How does it work?

Simple. You go the Napster website and sign up with them – for free. You then use their search engine to look for the song or artist you're after, and their directory server tells you exactly who's online with that file available at the moment. You can then download the file direct from that person's computer – also for free, except for the cost of getting online, of course.

Didn't I hear some kid's behind it?

Kind of. Napster, the software package, was the brainchild of Shawn Fanning, a 19-year-old college student from Wisconsin, USA. But Napster, the company is now a multi-million-dollar enterprise, having received vast amounts of funding from venture capitalists who see its potential as a money-spinner in the future.

How would that work, then?

Recent research suggests that people who use Napster would be quite happy to pay a subscription fee. 58.5% of those who use it, according to a report from online researchers Webnoize, would be willing to pay a $15 monthly fee.

And is that likely to happen?

Not if the record industry has anything to do with it. The Recording Industry Association of America (RIAA) is currently locked in a legal battle with Napster, claiming it promotes online music piracy (the trading of illegal MP3s). Metallica and Dr Dre have had a pop, too, claiming Napster's depriving them of their royalties.

So can we kiss Napster goodbye?

Well, it's the RIAA case that's the biggie. The initial hearings already led to an injunction that gave Napster two days to shut down, but they appealed and got a stay of execution. As we go to press, it should still be in business until at least 8 September, when the RIAA file their response to the appeal.

Ah yes, I was worried about that. Is it legal?

There's the rub: it's a bit of a grey area. You don't download things from, or even via Napster, you see. It's not a website, it's a file-sharing package. It works by effectively turning your desktop or home PC into a mini web server in its own right, allowing you to trade music files with other users direct.

Er, what's the difference?

The difference is that, however many people use it to swap illegal MP3 files of their favourite music, Napster can't be prosecuted for transferring illegal MP3 files, as no illegal MP3s actually go through its servers. This means that, unlike people who post illegal MP3s on websites, Napster can't simply be forced to shut down. The RIAA has to prove that they're 'promoting' music piracy, because Napster are not actually involved in any piracy themselves.

So what's going to happen next?

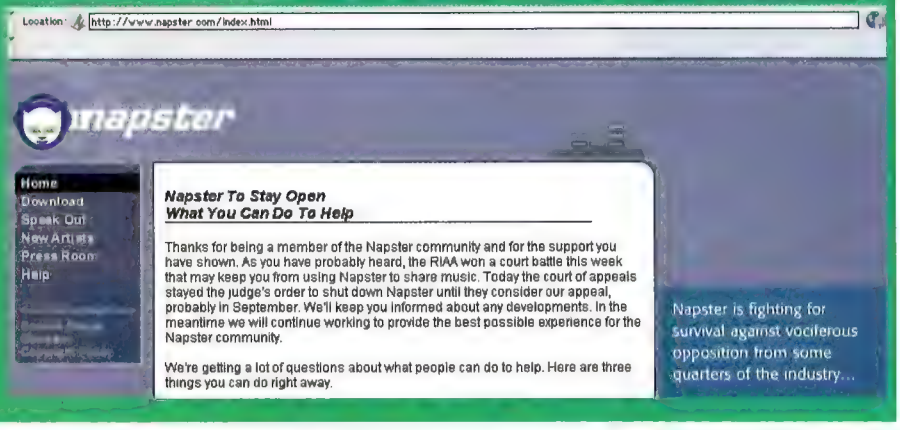
Who can say? At the time of writing, the outcome of the court case is yet to be decided. It's possible that Napster could be closed down permanently. It's equally possible they could be allowed to continue – in which case some sort of subscription-based licensing deal with the major record labels is likely.

Is that everything?

Well, we should probably mention that there's now a rash of Napster-like packages on the net. What bothers the record industry about these is that some of them don't even use a centralised server, as Napster does, making them almost impossible to track down.

So I'll still be able to download lots of free music?

Well, you will, but you'll be breaking the law – and we can't condone that. But until the record companies get their own online strategies sorted out, what do they expect?



"Wake up and smell the coffee", says Besonic's Antony Johnson

Easy life? Think again, says Antony Johnson, Head of Music at besonic.com

Picture the nostalgic scene: 20 or 30 years ago, you stuffed your band and all your gear into the back of your mate's dodgy Transit van. The stereo didn't work, and you always ended up sitting by the rattling rear doors fearing for your life all the way to some dingy pub in Birmingham. You would be the first of six bands on, so you wouldn't get a sound check, but that didn't matter, because no-one was going to be there anyway! All that mattered was the fact you were getting your material out of the rehearsal room and into some fresh-eared gig-goers.

Things have changed. There is no longer a legion of pubs or clubs looking for live acts, and ones fitting that ever-dwindling category are, more often than not, booked six months in advance. One of the only places left to showcase your up-and-coming band is on the internet. But don't worry, there you have a bigger potential audience than 100,000 Wembley stadiums!

If there is one thing that really gets my goat it's when a band says to me, "We put our tracks on the net, and nothing happened; it doesn't work!" I always respond in the same way: "Go and play a gig at the NEC, but don't advertise or tell your mates or encourage your family to go. Just play. How many people will come to see you?"

To create an internet fanbase, you have to work just as hard as you always have – let's face it, nothing worthwhile is easy. Instead of hours in a van, it's case of hours spent online. But when there are four or five members in a band, a lot can be achieved. Join every message board, chat room, and so on. Bully people into visiting your site and downloading your tracks. Form a mailing list, so you can preach to the already-converted. It *will* work.

Silverman, a UK band on Besonic, have managed to be downloaded more than 70,000 times, and are starting to attract the attention of many labels. It's not just down to luck; they have worked every spare hour to bring their music to the attention of the masses. So have a go, and don't forget: it's not easy, and it's not going to happen overnight – unless you're *very* lucky.

• *Antony Johnson*

way, we get 100% of the profits – and we're not stuck with all the stipulations of a lengthy contract where we can't regain our own control over what we do".

Self-promotion

There are dozens of such stories – the web really can help you get your music heard where it counts, and at very little cost. But what can you do to get yourself noticed, when there's such a huge amount of music out there already? Our main advice here would be that you can't just expect to stick your music online and have an audience come flocking to you, swiftly followed by A&R men waving blank cheques. Just like in the real world, the key is promotion.

Take the case of Jenna Music, for instance. "Every day I spend an hour researching new sites," claims Jenna, "going to chat rooms and message boards and just talking about the music. For instance, I'll go to a chat room related to a similar artist, like Sheryl Crow or Melissa Etheridge, and I'll put up a message saying, 'Hey, you know, there's this other artist that you might be interested in…' You've got to be proactive".

Another mp3.com chart-topper, trance artist 303 Infinity (a.k.a. Mikel Fair from Texas), agrees. "In order to move up the charts, you have to promote your website. I started out by passing out flyers on South Miami Beach for 12 hours, every weekend. Right now, 303 Infinity is a full-time business!" But it's evidently one that's paying off, for 303 Infinity's 'Winter Rain' was the most-downloaded track at mp3.com in February this year, and Fair's garnered nearly $60,000 in Payback For Playback earnings so far. If you're still not convinced that online promotion works, think how many pub gigs you'd have to play to earn that.

As we said at the beginning, there's also merit in getting your music on as many sites as possible, as more people will find it that way. And most of the organised sites will let you link to your own web pages, so it's a good idea to build your own site, offering content that there isn't space for at mp3.com, or wherever. Don't forget also that the more attractive your site is too look at, the more 'sticky content' it's got – the stuff that makes people want to hang around a while, in other words – then the more attention people are likely to pay to it. So, get some pictures online, get some information about yourselves up there, and make sure the site's appealing to look at and easy to navigate.

Get out there

If you were sceptical at first, you should surely be convinced by now that putting music online can offer multiple benefits to the up-and-coming musician. So, first of all, get your music up there. Get your 'online presence' into shape, and then get it talked about – get people to your pages and get them downloading your music. Visit chat rooms and message boards that are relevant and point people in the direction of your music. Put the web address for your online music on your gig fliers, posters and tickets. Put it on your demo tape or CD, too. Get all your friends and family to download your music – it's the tunes that get the traffic that get noticed, so bribe 'em if you have to! Oh, and our sister magazine *MP3* runs a 'Plug U Like' section – 'shameless self-promotion made easy' – so let them know it's up there, too.

Next month, we take a step back and look at how the net can help out at the production stage of your music – until then…

How the big names are using the net to distribute their music…

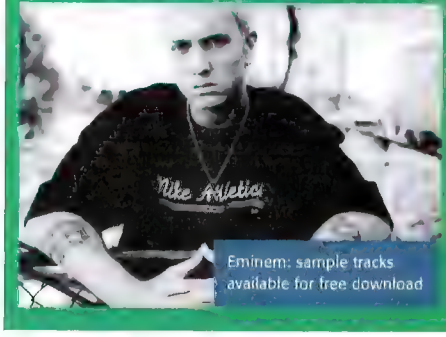
If you need any further convincing as to the internet's value as a promotional tool for upcoming artists, just consider the way it's being used by some of the big names in the music industry:

Vincent Bouchard/Idols

Chuck D vows to ride the MP3 bandwagon "like a muthafuckin' cowboy"

One of the most vociferous pro-MP3 campaigners has been Public Enemy's Chuck D. Avowing his intention to 'ride MP3 like a muthafuckin' cowboy', the outspoken rapper released the whole of PE's *Bring The Noise 2000* album on the internet, and has set up his own website where you can download tracks in a variety of formats.

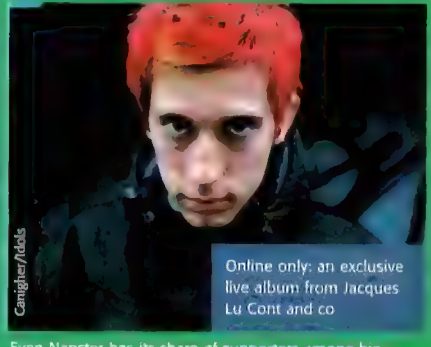
Other artists, while not quite so precocious in the field of online music, have seen the benefit of making tracks available for free download as a sampler for their new albums. If it's good enough for Eminem, Beck, Slipknot, AC/DC and Sinead O'Connor…



Eminem: sample tracks available for free download

Many independent record labels, too, are beginning to see the value of letting people hear their music in cyberspace, in the hope they'll invest in real-world product later. At epitonic.com, for instance, you'll find a wealth of free material from respected independent labels as diverse as Naked Music, SubPop, Wu-Tang Records and 4AD. And that's just the free stuff.

Numerous artists and labels have also gotten involved in the growing number of pay-per download MP3 sites out there. Go to EMusic.com, for example, and you'll find huge amounts of downloadable material by everyone from Elvis Costello to Green Day, via The Kinks, Goldie and The Bhundu Boys. Until the big record companies get their own online strategies figured out, this is a trend that looks likely to continue. UK site iCrunch, meanwhile, has a wealth of material from smaller labels like Bellboy, Fused & Bruised and Soma, including an exclusive live album from Les Rhythmes Digitales.



Caniglier/Idols

Online only: an exclusive live album from Jacques Lu Cont and co

Even Napster has its share of supporters among big name artists. While Metallica and Dr Dre have been busy serving writs, several other acts have spoken out in favour of the phenomenon. Offspring mainman Dexter Holland has stated publicly that having the band's music distributed via the program "definitely didn't hurt our record sales", and the band have refused to join in Metallica and Dre's lawsuit, despite using the same lawyer. Nu-metallers Limp Bizkit and stoner rappers Cypress Hill have taken things one step further: they're undertaking a Napster-sponsored tour of the US – with all the gigs being free. Ver Bizkit's Fred Durst said of Napster: "if our fans are down with it, we're down with it. The only people who are scared are people in the record industry who are used to the old way and they're scared of change."

Ross Halfin/Idols

Courtney Love: a staunch supporter of online music

But perhaps the most outspoken advocate of online music recently has been Courtney Love. She started a speech to the Digital Hollywood conference with the words, "Today I want to talk about piracy and music. What is piracy? Piracy is the act of stealing an artist's work without any intention of paying for it. I'm not talking about Napster-type software. I'm talking about major label recording contracts." Going on to criticise the way the record industry "steals" artists' copyright and asking the question, "Downloads are creating more demand – why aren't record companies embracing this great opportunity?" she ended by saying, "new technology has brought a real opportunity for change, we can break down the old system and give musicians real freedom and choice".

And that's the truth – if not the Hole truth!

ADVENTURES IN AUDIO

MIC TECHNIQUES

This month, our *Adventures* series takes you on a whirlwind tour of microphone choice, placement and techniques for beginners

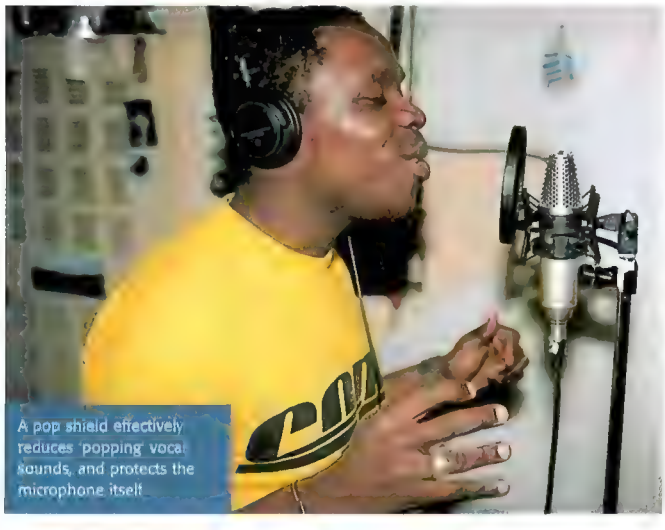
Quality sound starts at the source. Assuming you've got good instruments and vocals to work with in the first place, the next step up on the recording chain is the microphone. (If you haven't got the aforementioned, sack your band or buy yourself a load of 'correctional' processors. But that's a separate article.)

But what kind of mic do you need, and how do you go about getting the best recorded results? Let *Adventures in Audio* start you on the road to recording glory...

Gearing up

1 Start with the best-quality microphone you can afford, but keep in mind that a recording is only as good as the sum of its parts. If you have a quality large-diaphragm mic and a noisy mixing console, for example, then the result will be poor, so try to choose a balanced set of products. Check the manufacturers' specs on noise and distortion, and match each part of the chain as best you can. However...

2 If your mic is out-performing your console, and you don't have thousands of pounds to upgrade your mixer, buy a dedicated mic preamp. These typically cost anywhere from £100 to £2,500 and can greatly improve the quality of your recordings. A mixing desk will have an identical mic preamp on each channel that has typically been built to a budget, whereas with a dedicated mic preamp, built to handle only one or two mics, the quality is generally higher. A win/win position? Not quite. The drawback is that you are limited to the number of tracks that you can record simultaneously through the mic preamp.



A pop shield effectively reduces 'popping' vocal sounds, and protects the microphone itself

With its internal battery, AKG's C1000S is an ideal choice for recording on those awkward occasions where no phantom power is available

Recording vocals

3 For vocals, ideally you should use a condenser mic, which will usually require phantom power (unless it's a valve condenser mic that comes equipped with its own power supply). If your mixer or preamp doesn't come with phantom power, you'll need a separate phantom power unit. Alternatively, some microphones, such as the AKG C1000S, can work from an internal battery as well as phantom power, making them ideal for non-studio situations such as live recording or sampling into your DAT or MD recorder.

4 Choose the quietest environment you have at your disposal to record in. A large-diaphragm condenser, coupled with a classy preamp, will give detailed sound reproduction, but will also tend to be very sensitive, picking up every nuance of the sound. If you're recording in your bedroom and someone is watching television downstairs, it's quite possible that you will be recording snippets of *Coronation Street* or *EastEnders* that may be audible between vocal phrases. Using the switchable high-pass filter on your desk, preamp or mic will help to minimise any low frequency noise such as the rumble of distant traffic.

5 Avoid placing the mic near walls, as reflections can affect the phase of the vocal signal and you may notice a thinning of the tonal quality. Ideally, put your mic and vocalist in the centre of the room. To avoid picking up reflections and room reverb, try building an impromptu booth around the mic and singer using duvets, sleeping bags or heavy blankets, hung to each side and behind the singer. This should give a drier vocal sound, allowing more scope to add reverb at the mixing stage instead of being stuck with the inherent sound of the room.

6 Position your vocalist between 6"-12" away from the microphone, and, ideally, use a pop shield placed an inch or two away from the microphone. This will discourage him/her from walking into the microphone and will stop popping on 'P' and 'B' sounds caused by exhalations of breath, as well as protecting your microphone from breath moisture and saliva. You can buy ready-made pop shields, but making your own is easy enough and considerably cheaper: simply bend a metal

The dbx 386 dual-channel tube mic preamp offers yesteryear's vacuum tube warmth in the convenience of a modern 1U rack

coat hanger into a square shape and stretch a stocking over the wire, then just tape it to a mic stand to position it where you want. (Note: this doesn't look glamourous and could lead to arguments with your girlfriend/mother/transvestite brother.)

7 When sending foldback (the track) to the vocalist, always make sure the headphone level isn't so loud that it will bleed onto the recording. A little reverb on the foldback vocals will help the singer to pitch correctly – don't overdo it, though, as this will make the singer rely on the reverb size for intonation. And, of course, don't record the reverb with the vocals, as this will limit your options during mixdown.

8 You can control the vocalist's dynamics with clever manipulation of the foldback. If the vocalist is singing too low in level, reduce the vocal level in the foldback mix and he/she will automatically raise their voice to compensate. And if he/she singing too loudly, then increase their vocal level in the foldback mix, thus forcing the vocalist to sing more quietly.

9 If you have a mic with selectable polar patterns, choose the cardioid pattern for vocals. The cardioid pattern is the best for recording a vocalist standing in front of the mic, while rejecting most of the sound coming from behind.

10 To help keep a consistent level when recording vocals, use a small amount of compression, but don't overdo it – you can always add more when mixing, if necessary. If your singer stands in a different position relative to the mic for each take, this could result in changes of level and timbre. To avoid this, mark the position of their feet on the floor with some masking tape.

Recording instruments

11 Microphone placement is probably the single most important factor in capturing the sound of an instrument. Small movements of a couple of inches either way can make a big difference to the sound that is captured. With acoustic instruments, the sound is projected outwards and a bit of space is needed for their characteristic sound, or voice, to form. So, to find the best-sounding mic locations in your given room, walk around and listen at different positions as the instrument is being played. You may wish to do this with the microphone, trying different placements while listening to the results through headphones. If you can't get the exact sound you want by mic placement alone you can add some EQ, but always try repositioning the mic first.

12 The choice of microphone for recording a particular instrument is determined by the sound of the instrument and how loud it is. Condensers can usually pick up more high end detail than dynamics, but are much more sensitive to sound levels, and can be damaged if placed close to loud sound sources. So, for relatively quiet instruments with a sound that extends into the high frequency ranges – like an acoustic guitar, for example – a condenser might be the first choice, but for loud sound sources, like snare drums or guitar amplifiers, a dynamic mic may be more suitable.

Mic preamps

13 There are different types of preamps available featuring either solid-state or valve circuitry or a combination of both, and some feature a digital output, as well as analogue. Regardless of the type of circuitry, the key features will often include a combination of the following:

- A balanced mic input for the best possible signal
- Phantom power
- Input/output level control
- EQ contouring – a switchable high-pass filter, for example
- Phase reversal
- A de-esser to reduce sibilance
- A compressor

14 A preamp featuring valves can give the impression of warmth to a recording by adding harmonic distortion. Valve preamps also allow you to drive the unit into overload, exaggerating this warmth and squashing the signal – a form of compression.

15 For the cleanest possible signal, connect the mic to the preamp, and the preamp directly to the recorder's input, bypassing the desk completely. Otherwise, you will only be sending the signal through unnecessary circuitry, possibly degrading it and adding noise.

Experiment with different placements to obtain your desired sound before resorting to EQ

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Each month, *Adventures in Audio* brings you essential recording tips, plus the chance to take your questions straight to the experts at our live road show. This month's event – Professional Mic Techniques and Preamps – will take place at The Digital Village, Birmingham, on Thursday, 28 September, kicking off at 6pm.

The seminar and forum will be chaired by Niki Meville-Rogers, The Digital Village's Pro Audio Consultant, with special guests Max Lindsay-Johnson (AKG), John Willet (Neumann) and Justin Frost (Audio Technica). Contact Paul Taylor or Chad Brittle at Digital Village Birmingham on 0121 687 4777 to book your free place.

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Your demos rated or slated by *The Mix* and our discerning record industry pals. Meet this month's team...

Luke Cunningham
Label Manager,
Freedom 4

Sam Winwood
A&R,
Sony S2

Sil Willcox
MD,
Cruisin Music

DURRUTI
DEMO

TM: Kicking off with a lush guitar, it's pretty obvious that this guy can play with feel. In fact, at times, he could be accused of over-playing that feel. There are loads of great ideas at work here, but some of them seem to get drenched in their inventiveness – if that makes any sense! Opener 'Gotta Guitar' would really benefit from having another element onboard. I suggest vocals, but maybe I'm just being old-fashioned. 'Como Me Llamo?', on the other hand, is so fuelled with psychotic energy that it requires nothing more. Nine Inch Nails spring to mind; not sound-wise, but in terms of attitude. My concern is that most people won't 'get it'. But I'd love to be wrong.

Sam: This just doesn't go anywhere.

Sil: A well-paced track that has a good solid guitar riff intro that goes on just a little too long. Then the sound just seems to fragment for no apparent reason, before returning to that original riff. This definitely needed a menacing vocal to give it that well-constructed sound production feel.

Luke: Fantastic production, but unfortunately a rather dull tune.

More from: Durruti Tel: 01924 339532

MADMAN
DEMO

TM: By their own admission, this is Madman's first musical venture. And, unsurprisingly, while there are some corking ideas at work here, it all smacks of stuff from not-so-recent history. They obviously like their Europop, and I ain't about to take issue with that, because they do it damn well. Hell, they even manage to slot in some pretty riffs and overdriven guitars, so top marks there. What it lacks is identity. Like many demos, there's a spark of originality going on, but, in this case, it's just not enough to separate it from the masses. Kind of a shame that, because there's a strong voice onboard here, as well as some nifty production tricks. They've definitely got it in 'em, they just need to get it out there to a nice big audience.

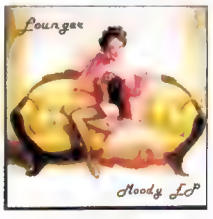
Sam: Is this The Shamen in disguise?

Sil: Effective Europop that could well get signed in Germany. Although excellently put together, this is a bit too Erasure for me, but there is a big market if you get it right. Not for me, but good luck.

Luke: 'Today, Matthew, I'll mainly be singing in an '80s stylee...' – Howard Jones defrosted!

More from: Madman Tel: 020 8677 1346

LOUNGER
MOODY EP



TM: Lovely lilting guitars, mellow vibes (the instrument, not the, er, vibe) and chilled-out Hammond nuances kick off 'Hit The Strip', the opening track of a demo that couldn't really be more aptly-titled. And then, just when you're feeling blissed-out, a weedy, but very cool, guitar enters the fray. Bizarre. The surprise here is that the whole effort was put together on VST, Wavelab, a Guillemot soundcard and 'a guitar'. It sounds so hotel lobby-live – a talent in itself. 'Willie's Dog' takes things up a notch in momentum, but the ethos is still there. This is very strange stuff that needs a more definite angle if it's gonna get anywhere. What is clear is that Lounger evidently had a ball putting this together, which is sometimes an underestimated necessity.

Sam: Lounger by name, Lounger by nature; very chilled-out.

Sil: A toss up between Ennio Morricone and *Vision On* – an interesting lounge lizard vibe that is screaming out for a foxy vocalist.

Luke: Great atmosphere; I liked this straight away. Really economical, but lots of fun. This is acid jazz/fusion as it should be!

More from: Lounger Tel: 020 8341 7661

a&r checklist

We receive a mountain of tapes every month, so to maximise the chances of having your demo reviewed (and, if you're really good, getting on *The Mix* CD) we need you to provide the following:

- Decent quality cassettes, (preferably chrome type II), CD, DAT or MiniDisc.
- A kit list of the gear used to produce the demo.
- A biography of the act. We want to know all about you, your studio and your production background!
- Artwork. This can be a picture of the act, or maybe an original groovy graphic.
- Most important of all, send us extremely cool music that genuinely deserves to be going places.

Unsolicited packages might be accepted at the following address:

A&R Dept,
***The Mix,* Future Publishing**
30 Monmouth St,
Bath, England BA1 2BW

FASTCHILD
BLISTER

TM: This, in some ways, is your typical producer/composer working away on VST and his assortment of synths, before drafting in a sultry female vocalist to do the honours. But there's something that sets this apart from the quagmire of dross that often falls under that particular banner. I can't quite put my finger on what the difference is, but I'm sure it's got something to do with the endearing voice of Tracy Fountain, who would benefit from being higher in the mix, and the lush, slightly trancey production skills of David Nash. Whatever. It works a treat, and with some nifty bits of kit, including a Proteus, BassStation and JX8P, Fastchild have created what is essentially a fantastically original sound with a well-selected and utilised array of gear.

Sam: It's all very nice, but there is just no spark there.

Sil: Firstly, a good name. Secondly, a good voice. But then you're left waiting far too long for something to happen. The vocal needs to be much higher in the mix, and there needs to be more of a bottom end in the recording – a cello or something to give the spacey keyboard lines something to bite on. Otherwise, a good overall sound and chorus. Close, but no cigar.

Luke: Try Tipworld or Flying Rhino for advice on where to take this particular blend of trance/ambient pop.

More from: fastchild@hotmail.com

AARON BANSIE
SOUTH COASTIN'

TM: Aaron seems well into his UK garage, and he's got the advantage of being one of those musician *and* DJ-types. Stints of DJ-ing in the south-west of France, and having played bass in numerous bands, give him a real edge when it comes to knowing which sounds to pick and where to place them – both in terms of arrangement and panning. The bass lines here are instantly memorable, and along with some deft drum programming – I don't think they're samples, but I could be wrong – they make for some truly grooving pieces. Some of the more quirky elements, like drastic tempo changes and bizarre instrumentation – trumpets colliding with vocals in very strange ways – are clever, for sure, but could be in danger of being seen as showing off. The old adage of being able able to do a track on one instrument and still know it's great holds particularly true on this effort. Keep with the simple elements – they're certainly strong enough, and concentrate on building up that crucial buzz around yourself.

Sam: This is a pleasant enough effort, but it does seem to suffer from a lack of any kind of real substance.

Sil: In trying to instill a jazzy feel to this track, the rhythm programming makes the tune fall over itself, thus becoming too disjointed to be clever. Not a favourite.

Luke: Dull UK garage/house hybrid.

More from: Aaron Tel: 020 7372 8677

DANTE
SID MUSIC

TM: Always good to get a bit of out 'n' out rawk in yer lug-holes from time to time. And this guy's got the trademark Sepultura sound pretty much nailed. The snarling vocals, the distorted-as-fuck guitars, and maniac drumming are all there. They're obviously proficient players with more than a few gigs under their collective belt, I reckon. For what is essentially a live performance, Dante have managed to capture that vibe without compromising the recording quality; as a production this really is a strong demo. Perhaps the only potential pitfall here is that it's all been done before. Whether that's a concern for Dante, I don't know. And, at the end of the day, I don't care, because they've got a style, and, blimey, they know what to do with it. The next step is to define it further still and really crack the market.

Sam: Decent enough thrashy track, but they really need to find their own sound.

Sil: A piece of music that actually has a sense of attitude and some humanity behind it. In no way am I a thrash metal fan, but if expression is an issue then this has definitely got it. Maybe not a Top 40 hit, but would be well worth developing.

Luke: Does exactly what it says on the tin. Manson-esque metal. While it's not very original, the production is spot on. With some better songs, it would be worth pursuing the specialist rock labels.

More from: starrman22@hotmail.com

demo of the month

DISS FUNK DEMO

TM: One thing is for sure at least; our mate Donal certainly doesn't diss funk – this Dublin-born-and-bred groover obviously truly embraces it. From the first bar of the opening track, 'Find My Way', you just know that this stuff is going to lodged in the mind whether you like it or not. Fortunately, we love it. Donal builds a standard, yet captivating intro with apparent ease before the distinctive – and bloody well-recorded – vocals enter the fray. "Funky-based dance music" is his self-description, and personally I think that's an underestimation of the talents at work here. There are some influences at work, but, hey, where would any of us be without them? Inventiveness is always the key to impressing record company big-wigs, and that's certainly one of Diss Funk's main fortes.

The use of subtly-introduced delays, the sultry female vocals, the minimal, but catchy beats, and the sheer groove of this stuff is really inspiring – if slightly derivative. But that's no bad thing; there are plenty of producers out there who would be willing to hone it all into something great. There's a real identity at work here, one that deserves recognition.

Diss Funk need to get involved in negotiations with publishing and record companies who have already noticed the obvious talent at work here. (We're told that there are a few.) It's rare that we put our cards on the table when it comes to demo reviews, but with the combination of obvious musical talent, well-honed production ideas, and great song-writing ability, I'd be very surprised if these guys don't get somewhere soon. You see, the whole package is there, and that's a lesson for everyone looking to get into this business.

Sam: The idea is cool, but the production just sounds a bit dated.

Sil: This act expresses the type of individualism that I initially look for in an act. The vocal has been cleverly processed to give this a unique vocal sound.

Luke: Good little tune this one; sounds like a kind of tripped-out Massive Attack. Commercially-speaking, this sound almost always does well, thanks to its having one foot in dance, and the other in dub.

More from: dissfunk@hotmail.com

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CD info

track 02
Diss Funk: 'Find My Way': Blissfully mellow funk with an esoteric pop edge. Clever and really rather fantastic...

help file

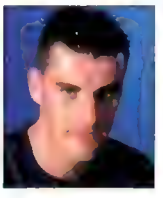
Problems in the studio? Ghosts in your machines? Contact the *Help File*, where our team of audio experts try to to solve your technical torments

glossary

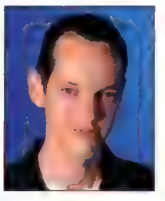
the masterminds

this month's *Help File* team

NAME: Trevor Curwen
OCCUPATION: engineer/producer
CHOSEN SUBJECTS: vintage gear, classic sounds, guitars, the Bay City Rollers



NAME: Sean Vincent
OCCUPATION: engineer/producer
CHOSEN SUBJECTS: PC recording, plug-ins, digital mixing, the KLF



NAME: Oz Owen
OCCUPATION: *TM* reviews editor
CHOSEN SUBJECTS: Logic Audio, MIDI, tube synthesis, the Doobie Brothers

Strings and things

Q I have managed to get two jobs recording demos for people in the near future, so I thought I'd pose a quick technical query: one of my sessions is going to involve recording a string trio. My plan is to hire a Yamaha 01V and three AKG 414s, then use the aux sends on the desk as direct multitrack outs to my computer via a Maxi Studio ISIS soundcard. I have two questions: firstly, what's the quality of the aux sends on the 01V, and, secondly, if they aren't already, can the aux sends be set to post-EQ and dynamics?

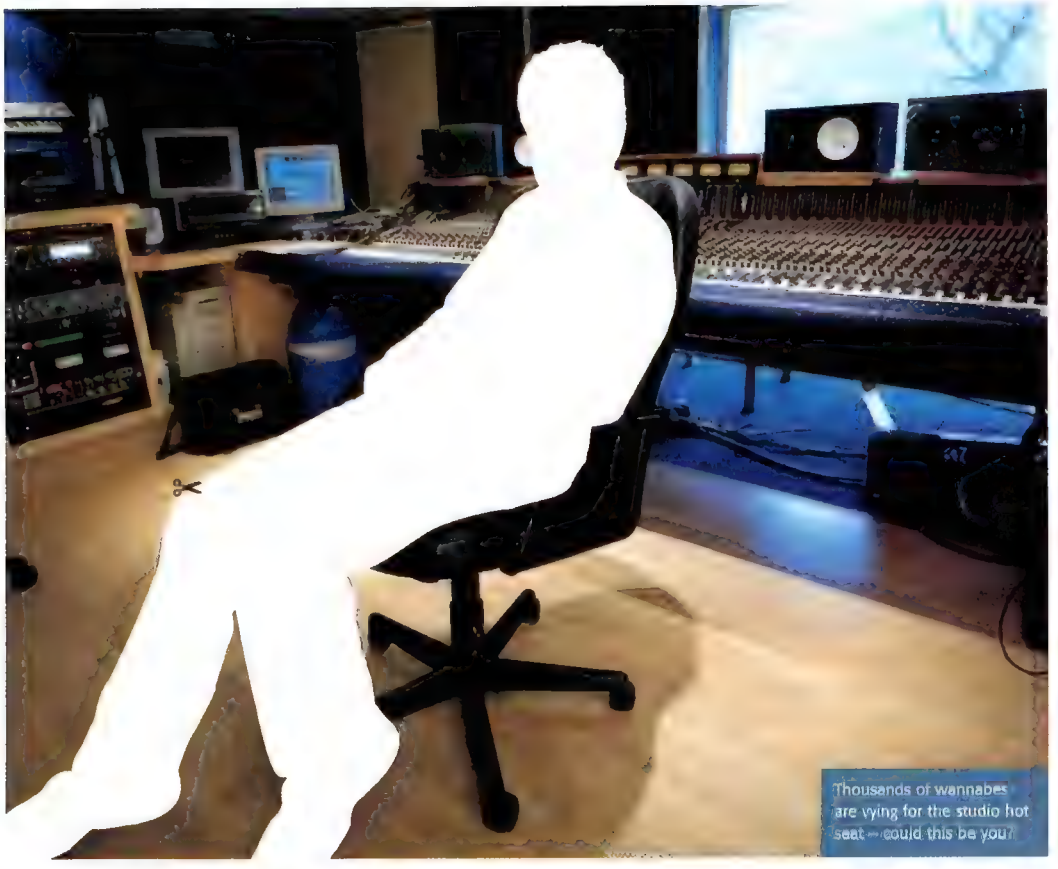
Nick Barron, Beckenham

A The Yamaha 01V will do the job, no problem, but it's a strange way to go about it. I believe the ISIS card has eight inputs, so why not hire a pair of stereo mic preamps, like TL Audio PA1s?

If you're recording real strings, you really want to get the best out of your mics, and this way you use the preamps to go directly into your soundcard. This does away with the need for a mixer at all.

You don't say what strings you are recording, but, as a guide – microphone-wise, I often use an AKG 451 on violins, a 414 (set to hyper) on cellos and violas, and a B+K 4006 on double bass. These seem to give

A mic preamp will get you the best quality signal committed to tape – or hard disk



Thousands of wannabes are vying for the studio hot seat – could this be you?

the best results and require little or no EQ. You may need to add some compression in the mix, but don't go mad – pumping strings never sound nice.

Sean Vincent

Careers advice

Q I have just graduated from DeMontfort University, with an upper second class BSc Honours degree in Electronics. Prior to attending university, I studied a BTEC diploma in Electronics and Communications.

I would like to pursue a career in the music industry, ideally working in one of the country's top studios, recording and mixing albums, though other careers, such as live sound engineering, film soundtrack or video game music composition, or stage monitor, engineering are also appealing. The design and testing of music electronics and equipment also appeals.

I have experience working on a number of professional shows, recording, effects, mixing, logistics, and so on, and would appreciate any advice or company contacts to write to.

Richard Bostock, via email

A It seems to me like you want to pursue quite a few careers, Richard, and while a degree in electronics will undoubtedly be a bonus on the design/maintenance side of things, it might not stand you in particularly good stead for manning the desk at Air or Real World. As you might imagine, there are all manner of people queuing up for a shot at the title – usually people with bags of studio experience to back them up.

But first you'd better decide which career you fancy. If you call up some studio manager and say, "I wouldn't mind doing this, or that, or the other," then they're going to think you're not very focused, and your chances of employment will suffer. So, decide what you want, *then* go for it.

As far as recording and mixing go, it's best to aim for the bottom rung and claw your way up from there. Start by hanging round studios and badgering the staff to give you a tryout. And why will they agree to take you on? Because you're charming, persistent and helpful. You know when to keep your mouth shut, and you don't mind doing 100 hours a week literally for little or no financial reward. And you'd best be prepared to make a lot of tea, clean the loos, get the fags in, not sleep, kiss your social life/girlfriend goodbye and assume the status of 'studio plankton'.

But... and this is the big one, with your energy, skill and enthusiasm, you'll be more than ready to slip into the hot seat when the regular engineer keels over and dies after spending a lifetime in air-conditioned bunkers. Now, this might sound negative, but, as I'm sure you're aware, this business is fiercely competitive and you've really got to push yourself into it.

For a list of studios to apply to, pick up the *Showcase International Music Book* from Showcase Publications Ltd (Tel 0208 348 2332). It's packed with all manner of music-related contacts to get you started. Good luck!

Oz Owen

glossary

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A DC voltage (usually 48V) that is appli[illegible] condenser or capacitor [illegible]

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The level of nois[illegible] [illegible]ssed in dB. in an audio system compared to a nominal signal level [illegible]

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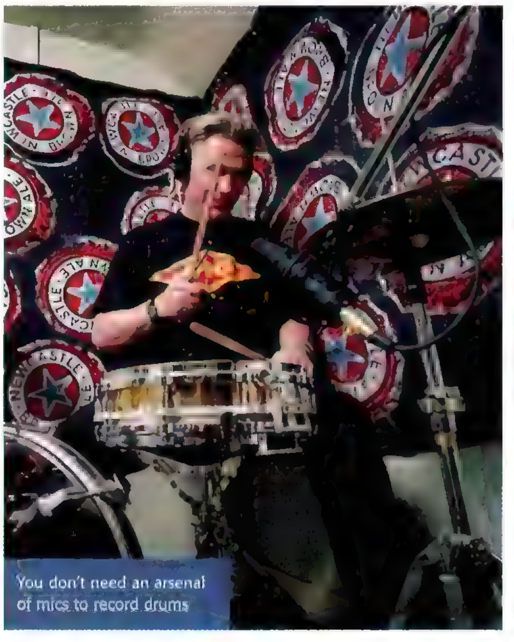

You don't need an arsenal of mics to record drums

You *can* kick it...

Q I want to record some live drums to make my own loops for use in my tracks, but have read that I need a load of mics – one for each drum and a stereo pair for overheads – to get an accurate drum sound. I only have two mics, a Shure SM58 and an AKG 1000S condenser, and only want to make stereo or even mono samples. Is it possible to record a kit with these?

James Turner, via email

A Yes, it *is* possible to get a good drum sound with two mics – or even one, if that's all you have. The secret is all in the placement. Although using separate close mics for each drum, plus overheads and room mics, has become the norm, and may give more flexibility in defining the sound, many recordings with great drum sounds have been done with a minimum of mics.

If you regard the kit as one whole instrument with a sound, rather than a collection of different drums, then you are thinking along the right lines. Before even considering mics, tune the kit so that it sounds just right acoustically in the room you are using.

Using your two mics, use one on the kick drum and the other hanging somewhere above the kit to pick up the snare and an overall sound. I'd suggest using the '58 on the kick drum – although it's not a dedicated bass mic like, say, an AKG D112 you should still get a decent result with it using EQ to tailor the sound. The C1000S will do the overhead job fine, just add a healthy amount of compression.

The position of the overhead mic is quite crucial in defining the sound of the kit, and you may have to try several positions until you find the sound that you want. As the drummer is playing, you may want to walk around the kit listening to get an idea of the sound in different positions.

Think in terms of how far above the kit the mic is and how it's angled towards the snare, and experiment with positioning – positions that are not conventionally obvious can sometimes work. For example, try putting the mic down low, somewhere between the rack tom and the snare, or even behind the kit, level with the drummer's head, facing down towards the snare. Get a good balance between the two mics and you're away.

Trevor Curwen

The need for speed

Q I have a 350MHz Pentium II, and am planning to upgrade. Obviously, I want to go to a faster speed, so here are a couple of questions for you: what is now considered the minimum processor speed requirement? And why are AMD processors not endorsed by most music software companies? Are there any reasons why we shouldn't use them for music applications? They are priced far cheaper than their Pentium rivals.

John Roper, via e-mail

If I tell you now what the minimum spec of a PC is, by the time you read this reply it will be out of date. Also, I have yet to see a music package that won't run on a very moderately spec'd machine – Nuendo, for example, will run on a 266MHz PII upwards.

However, if you want to keep close to the edge of PC technology you shouldn't go for anything much below the 600MHz mark. You should also be aware that the motherboard that your ageing PII is mounted on may not be compatible with a CPU of this speed – dig out the manual and look up the maximum processor speed, if you're unsure.

There is a simple difference between the AMD Athlon and Intel Pentium III: the Athlon is a faster processor at any given clock speed than its PIII counterpart and, perhaps more importantly, is much less costly. So, why indeed, you may ask, aren't these recommended for music applications?

Well, barring any cynical explanations that may spring immediately to mind, the realist in me would say that it's likely to be because there are only a certain number of possible systems that any software can be tested on, and the majority of PC users still have Intel chips in their beige boxes.

Theoretically, though, any program that will run on a PIII will also run on an Athlon, as they both use the same instruction set and the Athlon is the more powerful chip. But don't run out to buy an Athlon expecting to swap it for your old PII – you will need an Athlon-compatible motherboard, and would also be well advised to get an Athlon-approved power supply and memory. So, it may not turn out to save you money in the long run.

Adam Crute

Got a studio problem? Write to us at:
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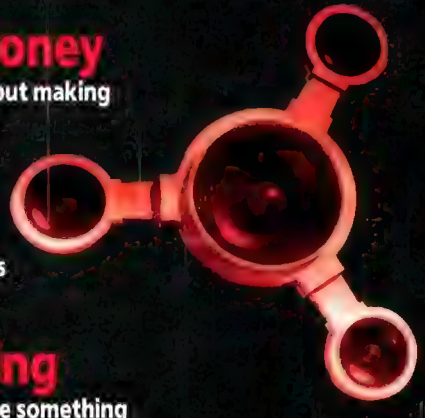
In this month's issue...

► Show me the money

Making your music is one thing, but making money out of it is quite another. We tell you how to market, promote and sell your work online, and give advice on avoiding the pitfalls and cowboys lurking in cyberspace



► Logically speaking

Emagic's Logic has just undergone something of an overhaul, and we take a look at not just version 4.5 but also the revolutionary EXS24 plug-in sampler. Plus 5 pages of essential tips to help you work quicker and smarter

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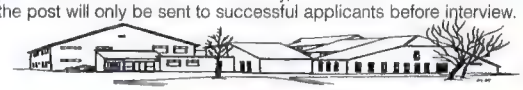

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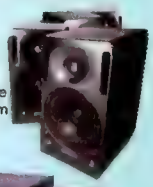

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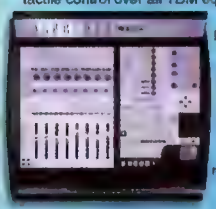

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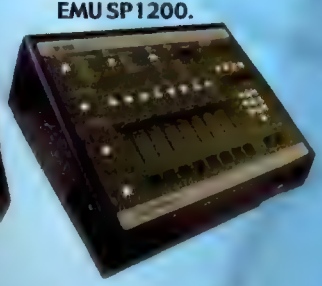

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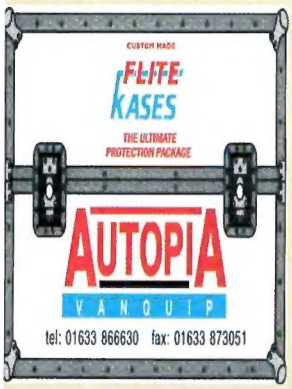

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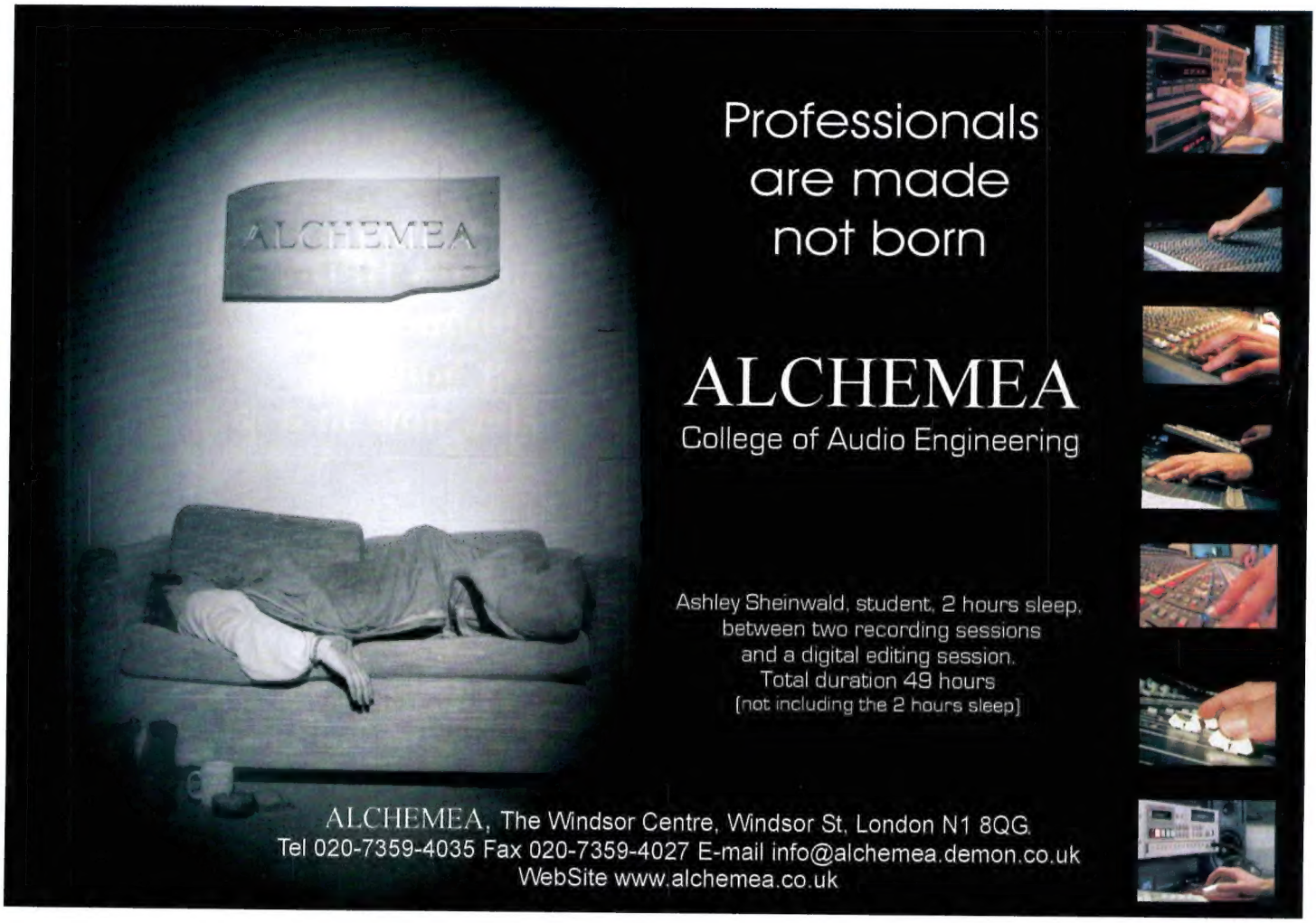

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Emagic Logic Audio 4.5

We'll be taking a look at the latest upgrade to Logic and checking out the new features, including surround sound panning, live inputs, and the new audio engine for Windows

On test

Hands-on percussion with Roland's HPD-15 HandSonic
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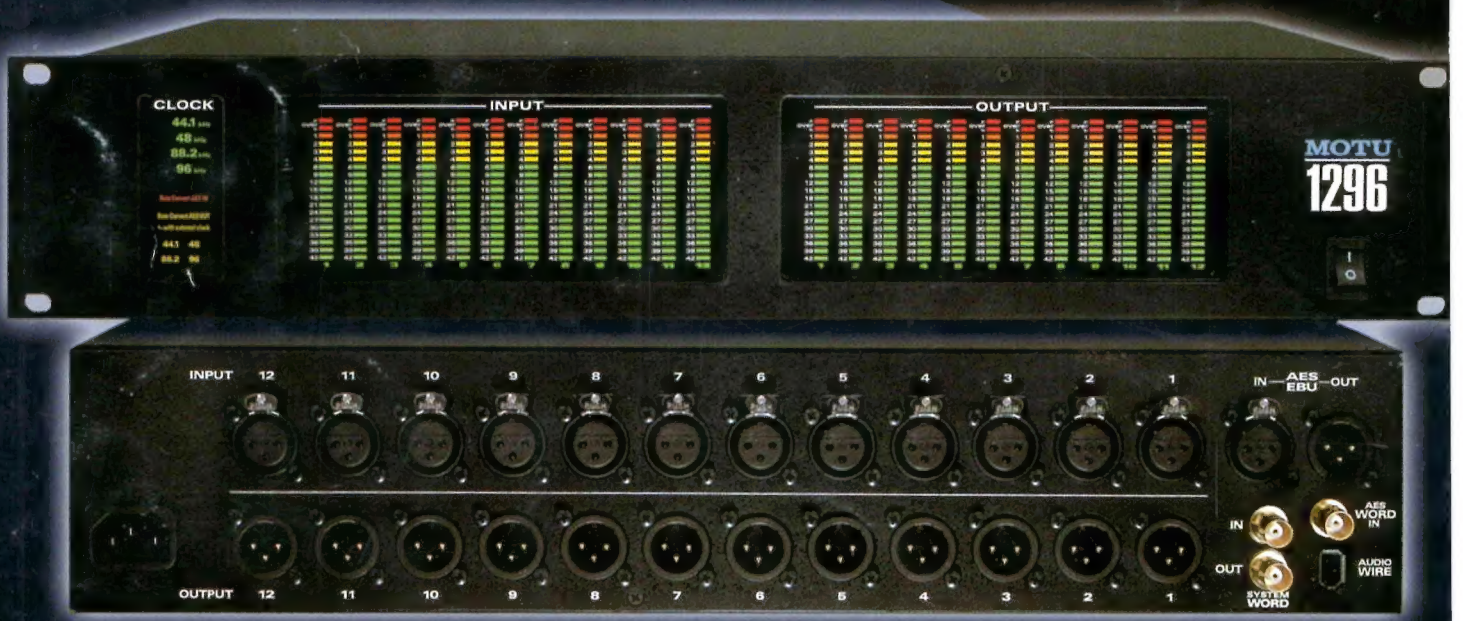

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